

HARD MONEY

Taking Gold to a Higher Investment Level

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Shayne McGuire



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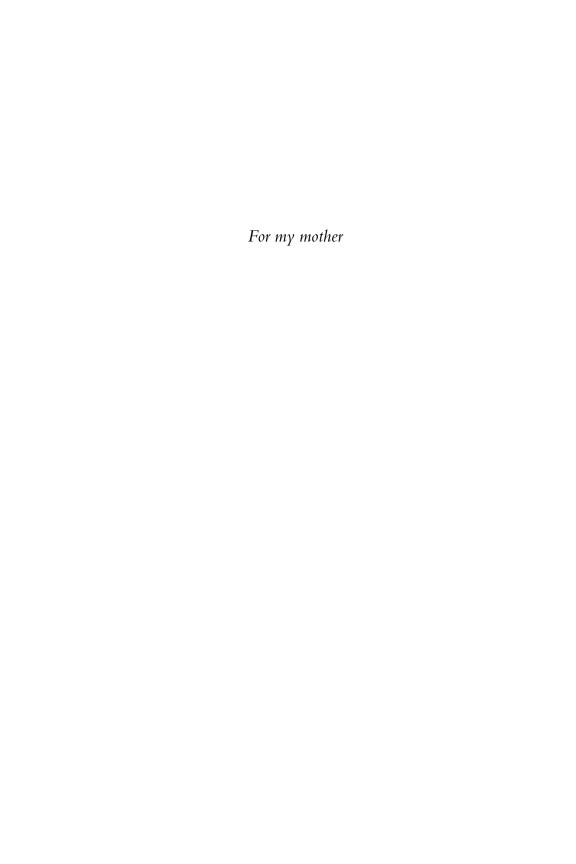
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Introduction

The World Doesn't Have to End for Gold to Go Hyperbolic

"When gold goes hyperbolic . . . "

"What did you say?" I interrupted, in stunned disbelief that a commodities specialist at perhaps the most influential and powerful investment firm in the world, would start a sentence with those words. Sitting at a table, talking over lunch, at Louie's 106 in Austin, Texas, on November 11, 2009, the other two persons at the table did not find the words to be particularly momentous. The thought that a metal that pays no interest, produces no earnings, and does not grow could jump in value, like some mega-stock, causing a sudden chain reaction of surging investment demand, did not seem remotely possible. "Hyperbolic" is something more akin to what happened to Apple when it launched the iPod....

"Can we order?"

colleague and I first approached the chief investment officer at Teacher Retirement System (TRS) of Texas in early 2007 to propose that our pension fund consider making a significant

investment in gold.¹ Being one of the fund's equity portfolio managers at the time, I had already considered the possibility of a sudden price spike, the chance that gold could go hyperbolic. This was not particularly insightful of me: Just about everyone else in the global community of financial professionals was considering it, too. They just saw it from a slightly different angle.

In books like *The Dollar Crisis*, in the *Wall Street Journal* and the *Financial Times* of London, in the *Economist* and *Exame* of Brazil, and in countless Wall Street research reports, the message was the same: The dollar is sinking.² The financial world was pointing at the United States' inexorable surge in debt—funded largely by foreigners—to an unprecedented three and a half times the size of American GDP. It was almost making a giant sucking sound, as our current account deficit absorbed more than half the world's net savings to fund it. At \$60 trillion, just the government's total liabilities, funded and unfunded, had grown to be larger than the capital stock of the entire country. And every time a Chinese central banker hinted that a new global reserve currency to replace the dollar would be "desirable," the dollar would fall. Whenever the United States' trade deficit worsened, the greenback would weaken a little more. Brazilian corn consumption rising? Time to sell more dollars.

Of course, the long-awaited collapse of the dollar—which has required some patience, as several economists were expecting it back in the 1960s—would necessitate the rise in another currency to replace the weakening greenback as the world's monetary foundation. Being the premier currency in virtually all of the world's central bank vaults, the U.S. dollar is the de facto foundation of the global monetary system, the metric used to weigh all other currencies, and hence the final measure of the value of everything that has a price. The dollar is the world's money.³ And a new dollar, whatever the chosen currency would be, would probably soar, the thinking went, as the dollar began to crumble in the beginning of a new financial era. This dual movement would have to take place because, in the foreign exchange world, the plunge of a currency means the surge of another one. And this was what many in the world have long been expecting, which is peculiar if you think about it.

For the dollar crisis to arrive, the greenback would have to crash against the euro (a currency barely a decade old which, thanks to the

likes of Portugal, Ireland, Greece, and Spain-regarded economically and by acronym as "PIGS" in comparison with more frugal France and Germany—may crash before the dollar); against the yen (whose economy crashed two decades ago and has yet to recover, in part due to the demographic crisis that is unfolding there, and whose government debt is soaring, prompting worries of an eventual yen crisis); or against the British pound (the currency of a country with a massive and alarming fiscal deficit the size of Greece's, a banking sector that is multiple times larger than the UK economy itself, and which has a terribly overindebted consumer). Perhaps the dollar will collapse against the Chinese yuan, as many are anticipating today. But that is unlikely, considering that China's economy is heavily reliant on exports, and its leaders have accumulated over \$2 trillion in reserves to prevent the yuan from rising. And besides, the currency doesn't trade freely. Given these issues, what major currency, one widely trusted—for decades, if not centuries—and in broad global circulation, could replace the troubled dollar?

The search for the answer to this vital question was rudely postponed by the sudden arrival of the global credit crisis in 2007. When French bank BNP Paribas announced in August of that year that it was unable to value some of its assets linked to U.S. subprime real estate assets, the crisis began. Within weeks there was a run on a British bank, Northern Rock, and financial dominoes began to fall around the world. In time, concerns about the dollar were forgotten and the safety of deep, liquid U.S. financial markets was remembered, despite the sharpest decline in the U.S. housing market since the Great Depression, the failure of multiple American financial institutions, as well as the end of the U.S. automobile industry, as we knew it. The dollar began to recover. (See Figure I.1.)

Notwithstanding the renewed vigor of the greenback, within a year of the BNP Paribas spark, it had become clear that the soothing sense that American economic cycles had been tamed since the troubled early 1980s, and that recessions had become milder thanks to men like Alan Greenspan, was a complete illusion colored by debt. And yet the evidence that we had been deluding ourselves about our economic health all along is apparent in the chart in Figure I.2.

It shows that roughly over the past two generations, despite the cycles of rising and falling inflation (which influenced interest rates),

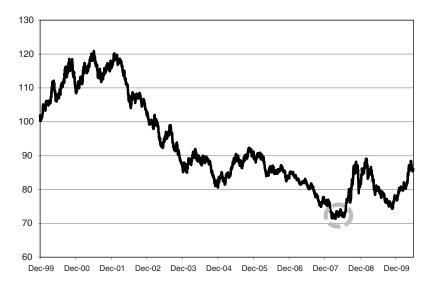


Figure I.1 The Dollar's Decline Was Interrupted by the Credit Crisis Source: Bloomberg.

of brief economic decelerations followed by seemingly healthy accelerations, the cycle of American debt was in no cycle whatsoever. It was rising steadily, outpacing our incomes at a brisk pace, and the peak of our leverage in 2007 was truly astonishing: At that point, five dollars in debt were needed to produce each dollar of American gross domestic product.

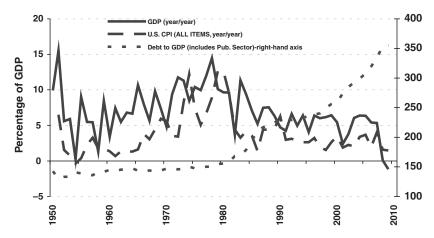


Figure I.2 U.S. Debt/GDP, GDP Growth, and Inflation, 1950–2010 SOURCES: Datastream, Federal Reserve Flow of Funds data, U.S. Census, Morgan Stanley Research.

When we hit the wall, the point at which our economy could no longer advance driven by debt and widespread deleveraging began, a new phase in the credit crisis had started. In 2008, with the economy frozen and beginning to contract, the trillions in annual credit that the public and companies were no longer willing or able to assume was taken on by our government—which means, essentially, that we borrowed from the future and made the government's financial health even more questionable. The national debt surged past \$13 trillion and, including unfunded liabilities, total government obligations soared to over \$200 trillion. Consequently, we now know that our taxes will have to increase and/or that our benefits, like Social Security, will have to decrease substantially in the years ahead.

This is not a book about a financial crash, about the end of civilization, about storing up food and a mysterious form of wealth for a long, dark financial winter. Considering the substantial investment that has moved into gold in recent years, clearly there is a growing number of people that have moved beyond what I call the drama of gold, the often boisterously presented notion that gold is appropriate for persons expecting the end of the world, or at least some variant of a financial catastrophe—in short, that gold is for losers. I have a wise friend who will not own gold out of "financial principle," the principle being that the metal does not pay a dividend or a coupon and that it is just a rock, a "barbarous relic"—as John Maynard Keynes famously called it—of some primitive financial era. "We have grown up, financially," my friend says, and we don't have to secure our wealth in the galleon anymore.

I agree—considering the lessons learned from two unprecedented debt-driven bubbles, one in the stock market and another in real estate—that we have grown up financially. Now that these bubbles have popped, the stock market has gone nowhere in a decade, and high debt has remained, there is a growing realism and understanding about the financial world we are living in, particularly regarding the need for financial insurance. And this maturation for a great many people has come from the sudden discovery of what *ultimate* financial insurance—that is, insurance providing insulation from government and financial firms themselves—really is. *Gold is the only viable investment asset that allows a person to remove wealth from the financial system per se.* A growing number

of people concerned about wealth preservation no longer look to financial intermediaries for ultimate protection, this following the unexpected collapse in recent years of the world's largest bank, the Royal Bank of Scotland, and the largest insurer, the American Insurance Group (AIG), among many other notable institutions now being directed by Western governments.

By extension, these events may have also led to the realization that *gold is the best vehicle for actually shorting government*; that is, betting on our leaders' failure to maintain our confidence in their ability to meet the ever-climbing liabilities they continue to incur (on our behalf) with money the world believes in. Expressed differently, gold is a good bet on a sudden rise in inflation. In the midst of surging government deficits across the world, readers of financial history know that betting against government—that is, on a sudden sharp rise in inflation—has strong odds.

Though fortunately a rare and extreme event, it is important to consider that all 30 documented cases of hyperinflation—that is, an economic situation in which prices rise by at least 50 percent per month—have been caused by deficits that got out of control. Ironically, hyperinflation invariably emerges in a deflationary environment of weak economic activity, such as the one that threatens numerous major countries today, most notably the United States, European nations and Japan. Hyperinflation can erupt when the public grows increasingly wary of holding the money being printed in growing quantities by monetary authorities, which are forced to buy—to "monetize," in the financial vernacular—a surging supply of government bonds the market can no longer absorb. That hyperinflation does not rear its head today, when conditions for its emergence are present, will require that central banks continue to maintain their independence from federal governments that need to control their overstretched budgets.

Every single currency in history has eventually fallen against gold—most dramatically in times such as these, times of surging liabilities and an increasing inability to meet them. Gold is the only currency, the only credible store of value whose quantity cannot be expanded to meet the spending needs of governments in distress. By its very nature, it remains scarce and rises in value as the quantity of paper money grows.

The Logic of Gold in the New Investment World: Follow the Money

Today, we should all be paying attention to a new theme: the simultaneous and significant deterioration in the public finances of many advanced economies. At present this is being viewed primarily—and excessively—through the narrow prism of Greece. Down the road, it will be recognized for what it is: a significant regime shift in advanced economies with consequential and long-lasting effects.

—Mohamed El-Erian, Chief Executive Officer, PIMCO, March 11, 2010⁵

Few financial professionals would question the assertion that asset allocation is one of the most important decisions in investing. The choices made regarding what percentage of your investment assets go into each bucket—how much to stocks, bonds, commodities (including gold)*, real estate, cash, and other investments—generally have a greater effect on your portfolio than the individual securities being selected. For example, picking great bonds in a declining bond market has a less positive impact on your wealth than the decision to move money out of the bond market, per se. Entering 2008, investors who were heavily invested in real estate and stocks fared far worse than those who were renting and had more exposure to government bonds in their portfolios. Those who had a balanced portfolio are better off than concentrated real estate speculators. The logic is simple and intuitive. Balance risk and reward based on your personal situation and don't keep all your eggs in one basket.

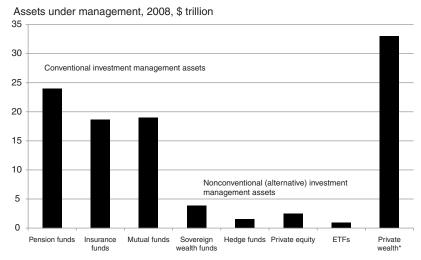
Another approach to asset allocation—one mastered by investment legend Warren Buffett—is to consider and try to anticipate how *the rest of the world* is going to shift their baskets of eggs—particularly at important turning points in financial history. That is, to follow the money—particularly big money, the trillions managed at the world's

^{*}I regard gold as commodity in this section simply because it is widely viewed as such in the financial community. It was only recently that a number of financial professionals, noting that gold was outperforming all other commodities significantly, began regarding it as a currency, which it always has been.

largest funds. Toward the late 1970s, money was flowing out of stocks, prompting headlines like "The End of Equities." Then, thanks to declining inflation and interest rates during the 1980s and 1990s, money flowed back into stocks (and out of assets like gold, whose 1970s boom was over) like never before. Investors anticipating and then participating in these massive investment movements, radical changes in investor perception and behavior, were rewarded for being in the right place at the right time—and these were waves of money flows lasting several years. There was no need to read sophisticated Wall Street asset allocation recommendations to understand that a growing portion of household income and wealth was being transferred into stocks during the 1990s and then into real estate during the 2000s. That is where the money was going. And professional money managers who bet against this flow while it was under way, even believing that the Internet or real estate bubbles would eventually pop, did so at the peril of their investment performance.

Each of these recent major financial periods had fundamental drivers that were linked to major economic changes and financial waves that benefitted particular asset classes, like stocks, bonds, and real estate. Presently, the financial waves continue to be dominated by the ocean of debt that has put a stranglehold on developed economies, in particular, and the leverage dimension is such that it will likely take quite some time to wash away. And I believe it's safe to say that, following the most dramatic credit crisis since the Great Depression—one that is continuing to produce ripple effects, like events in Greece that are broadening into Europe itself—we are likely to begin to see deep investment shifts that will provide significant opportunities.

This book suggests that one of the major beneficiaries of these changes will be gold, and it points to five major drivers in the chapters that follow this one. But I believe the fund management industry, which manages much of the world's wealth, will be gold's prime mover. And this would not be the result of simple modest buying in the markets, which has been happening over the past few years as global fund managers have nibbled at precious metals exchange-traded funds (ETFs) and mining stocks in mostly tactical, short term trades. No, I strongly believe that present financial conditions are about to cause a major transformation in asset allocation at the world's largest funds that will cause gold to surge substantially higher.



^{*}Approximately one-third of private wealth is incorporated in conventional investment management.

Figure I.3 Global Fund Management Industry SOURCE: International Financial Services London.

To understand why this could occur, let's consider today's financial environment and take a look at asset allocation at some of the world's largest investment funds. Pension funds, like the one I work for, have a significant effect on asset flows in the world's markets since they collectively manage \$24 trillion. (See Figure I.3.) To put this amount into context, Table I.1 shows the assets under management at all the world's largest institutions—totaling \$62 trillion at the end of 2008. If we include what is categorized as *private wealth* under management, this amount rises to over \$90 trillion (Figure I.3). Table I.1 provides some detail on how assets at pension funds, insurance companies, and mutual funds are distributed across regions. Global pension fund assets are distributed into equities, bonds, and alternative investments (such as real estate, private equity, and commodities that include gold). Though the percentages can vary by region and country to some degree, pension funds around the world hold approximately 56 percent of assets in equities, 34 percent in bonds, and 10 percent in alternative investments.⁷

These percentages have been set because the funds' asset allocators have determined that, over the long run, the combined portfolios provide an acceptable balance of risk and return potential. Considering that

\$ Billion, End of 2008	Pension Funds ^a	Insurance Assets	Mutual Funds	Total Conventional	% Share
United States	15,255	6,120	9,601	30,976	50
United Kingdom	2,658	2,576	505	5,739	9
Japan	787	2,555	575	3,917	6
France	144	2,007	1,591	3,742	6
Germany	109	1,692	238	2,039	3
Netherlands	810	444	77	1,331	2
Switzerland	404	356	135	895	1
Other	3,833	2,960	6,195	12,988	21
Total	24,000	18,709	18,917	61,626	100

Table I.1 Sources of Conventional Investment Management Assets

equities are the best-performing financial assets over the long run, it is not surprising that stocks dominate all large diversified portfolios. And bonds are also a significant part of the pie, as would be expected, considering the relative certainty of income and return of principal that the vast majority of bonds provide. Unless there is a financial crisis or severe recession, most corporate and government bonds deliver interest payments and return of principal, as promised. Hence bonds provide balance to the higher risk and volatility that stocks present to investment portfolios, and their diversification benefits are complemented by the 10 percent of assets that a typical pension fund holds in alternative investments such as real estate, private equity, and commodities—which include gold.

What is most striking about gold in relation to the fund management industry, the financial mammoth that invests tens of trillions of the world's wealth, is the negligible role the metal plays in global asset allocation decision making today. There is a widespread perception that the whole world is buying gold,* but big money—the collection of massive funds

^aFigures are for domestically sourced funds regardless of where they are managed. No reliable comparisons are available for total funds under management by country; IFSL estimates based on Organisation for Economic Co-operation and Development (OECD) and Watson Wyatt data.

Source: International Financial Services London.

^{*}Despite the ubiquitous talk about "everybody buying gold," I think an informal poll of your family and friends will reveal that a minority has actually been doing so. Among the many financial professionals I know and work with, as well as my friends and family I have asked, I can count on one hand the number of people who have any of their investments in hard money.

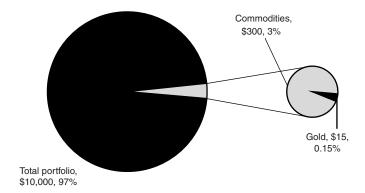


Figure 1.4 Percentage Holding in Gold at a Typical Pension Fund (\$ Millions) SOURCE: Teacher Retirement System (TRS) of Texas.

that truly moves markets—has barely tipped a toe in the water. Once the very foundation of the global monetary system, as well as an asset almost any person of means held as a matter of prudence and principle, gold simply doesn't matter in the big picture of modern global fund management today.

While funds invest in commodities (baskets giving them exposure to price movements in things like crude oil, natural gas, and copper), gold represents less than 5 percent of a typical commodities portfolio, which forces the metal to be almost completely lost in the overall asset allocation math dominated by stocks and bonds at pension funds. Here's why: If commodities represent 3 percent of a given pension fund's assets (a typical level these days), this would mean gold probably represents 0.15 percent of a total fund's assets (5 percent of 3 percent is 0.15 percent, as shown by example of a hypothetical \$10 billion fund in Figure I.4). So, including whatever it may hold in gold mining stocks and ETFs (maybe another 0.15 percent of total assets, but unlikely more than that), a typical pension fund holds less than a third of one percent in gold—that is to say, virtually nothing (Figure I.4). This is remarkable considering the tremendous diversification benefits the metal can provide for a portfolio when the stock market is not delivering as expected: During the 2000s, stocks were down 24 percent and gold rose 280 percent, a fact that would have benefitted any fund that invested significantly in the metal. And gold was beating stocks even during the 2002–2007 stock market rally.

Due to longstanding perceptions of its volatility and risk, as well as the small size of the precious metals market, gold is simply not regarded as a major investable asset class on Wall Street today. But this explanation omits the irrational side of our human nature: In the drama about gold, the widespread notion that one should only buy the metal when the world is going to end, most modern financial professionals have never considered it seriously as a major investment. Since it was an asset that performed very poorly during the equities and bonds boom of the 1980s and 1990s—when most financial leaders today were moving up the ladder—there is this lingering sense for many that gold will *never* make sense as an investment.

But suddenly the financial industry is being forced to think long and hard about gold since it must answer a troublesome question: If the global government bond market is about to enter a period of significant turmoil, and a considerable part of the colossal \$30 trillion in global sovereign debt is going to be dumped by the world's pension funds, insurance companies, banks, and individual investors, where will that money flow to? If not only Greek, Portuguese, Spanish, and Irish bonds are at risk, but perhaps also government bonds in other, far larger economies with massive debts and deficits—indeed, those of many of the largest economies in the world—where will the money go in the new asset allocation math? Stocks? Real estate?

Few would dispute that there are serious concerns regarding the financial health of a great number of governments in the world, from Greece to Japan and from the United States to the United Kingdom, as well as many states and municipalities within the United States, which have hundreds of billions in debt outstanding. Many are in severe fiscal crises today. Warren Buffett told the U.S. Financial Crisis Inquiry Commision in June 2010 that municipal bonds in the United States faced a "terrible problem." The federal government may soon need to confront it directly: A third of U.S. states have budget deficits exceeding 20 percent; California (with an economy as big as that of France, the world's 8th largest) and Illinois (as large as Mexico, the 11th largest) have budget gaps exceeding 50 percent. The Bank for International Settlements (BIS), widely regarded as an authority among central bankers, released a study in April 2010 that made a startling assessment of the financial health of the world's largest governments:

Our projections of public debt ratios lead us to conclude that the path pursued by fiscal authorities in a number of industrial countries is unsustainable. Drastic measures are necessary to check the rapid growth of current and future liabilities of governments and reduce their adverse consequences for long-term growth and monetary stability.⁹

That the value of a country's bonds should fall when its credit quality declines is not rocket science. The logic that U.S. Treasury bonds are attractive investments because inflation is falling becomes questionable when the government's very solvency is increasingly in question. And the same question is being raised about several of the other largest economies in the world. The United States and Japan, another country under severe fiscal stress, have issued more than half the value of all the government bonds on the planet. It would not be irrational to expect that a significant amount of investment could begin to flow out of the sovereign bond market, a move that would lead to higher interest rates and eventually have an impact on the value of all other kinds of bonds on international markets—and this would negatively affect the stock and real estate markets, as well. But if funds are indeed going to move out of sovereign bonds—and consider that we are talking about a \$30 trillion market—where would this money flow to?

The certain answer is that part of it would move *away* from the sovereign bond market. And considering that pension funds already have high exposure to equities, and alternative assets like real estate and private equity, it is reasonable to expect that a fraction of the funds—perhaps as much as \$500 billion or more—will eventually flow into gold, a time-proven real asset. Many of the world's largest funds barely have any investment in the metal relative to other assets, as discussed above: They would practically be starting from zero. Teacher Retirement System (TRS) of Texas, which I work for and whose GBI Gold Fund I manage, probably holds a larger percentage of assets in gold than any other large (\$10 billion and higher) pension fund in the world, but our holdings in the precious metal are modest, certainly in comparison with any major asset class like stocks and bonds.

If anything, a significant move into the metal could happen by default as even the most die-hard gold opponents might soon be forced to

consider it. What would be the alternative investment asset if we are entering a financial environment permeated by a global government bond market problem, which would affect *virtually all other major asset classes*? Improbable as it may seem now that we have pulled back from the financial brink we faced in 2008, an eventual crisis of trust in the 10-year U.S. Treasury bond could imply the impending end of its reign as the global *risk-free interest rate*, the decades-old foundation for all formal financial valuation. Consequently, until a more trustworthy replacement for the king of bonds was found, perhaps the value of financial assets in general would come into question and many investors would likely flock temporarily to gold and other commodities, as well as multiple tangible stores of value of a physical nature until financial balance was restored.

Now, the effect of suddenly moving a substantial amount of investment money into the precious metals market was best described in a telephone conversation I had with an expert in the industry: It would be like shoving an elephant into a mailbox. At \$1,200 an ounce, all the gold in the world—all the jewelry, coins, bars, molars, and church art—is worth an estimated \$6 trillion. But the vast majority of global gold, like the ring on my finger, is not freely traded. In fact, perhaps only 5 percent of all physical gold actually trades each year, which would make the investment gold market around \$300 billion. Last year, the mining industry produced around 2,500 tonnes* of gold worth around \$80 billion at the average price of 2009. But after subtracting a little over half, which is what is used for jewelry and industry, the amount of new gold available to the world's investment community fell to less than \$40 billion, an amount equivalent to what trades in Google, a single stock, in about 20 days. And one might think that scrap sales (from, say, people sending in jewelry to Cash4Gold or other forms of gold disposal) can add substantially to gold supply, but scrap never rises to more than 1 percent of total aboveground gold-even during screaming bull markets, such as the one in the late 1970s. I think it is safe to say that a surge in gold prices would not lead to an overwhelming surge in supply.

^{*}As recommended by Jonathan Spall, director of the Commodities Division at Barclays Capital, I am using the spelling *tonnes* as opposed to *tons* to refer to metric tons, since the metric term is used globally in the gold market.

The gold market is extremely small and a large movement of funds into the precious metal would cause it to rise sharply and fast. If gold rose from the minuscule part it represents in the world's largest portfolios today to just 1 or 2 percent of global assets under management, the effect would be substantial. That it could rise to \$10,000 an ounce is not out of the question, as I discuss in Chapter 6. It would not be the first time gold has risen in such a way: The price of gold jumped 23-fold in the nine years ending in 1980. And at that time there was no question about the solvency of the U.S. government nor about the health of the banking system. And the fund management industry held a much larger portion of its assets in gold.

Taking Gold to a Higher Level: Setting Up Your Own Gold Portfolio

Buying gold, which implies speculating that a rock will rise in value, is a somewhat unsettling proposition for a twenty-first-century investor. It forces one to move away from modern financial markets, where gold is almost completely absent, to rely on the history of money and governmental mistakes to understand that we have been here before—many times. As times change and the need to tighten fiscal belts arrives, countless governments across the world and time have driven their countries to the brink of ruin in an effort to continue spending without limit (believing they are saving the economy) via climbing deficits and—to use the modern vernacular—"quantitative easing": printing money to cover climbing federal expenditures.

Never have governments in peacetime gone so far, so rapidly, and spent so much (borrowed money) to save us from bad times as they have today. The national debt of the United States has risen by close to 50 percent in four years to \$13 trillion. But unlike our situation during the 1930s economic downturn, which U.S. leaders attacked with massive deficit spending thanks to what by present standards was a lean balance sheet, today such Keynesian remedies are out of reach. (See Figure I.5.)

In times like these, decisions regarding what percentage of wealth to hold in stocks versus bonds should be considered alongside the questions

Growth needs to be reignited to push down unemployment, yet:

Fiscal Policy Options Limited

Monetary Policy Options Limited

- * Deficits at war-time (emergency) levels
- ★ Important U.S. states in fiscal distress (may require further federal assistance)
- * Structural deficits kicking in (demography)
- * U.S. unfunded liabilities massive (U.S. \$202tr) and Fannie, Freddie still off government books (U.S.)
- * Fear of 1937: fiscal restraint could cause double dip (Depression resumed in that year)...
- * ... but without active (deep) deficit reduction, government debt/GDP continues rising rapidly

- * Central bank rates at or near zero percent . . .
- * . . . and hence monetary policy today means: print money
- * Excess sovereign bond supply has already forced monetization (printing) to occur
- * Central banks must maintain independence to contain inflation expectations
- * **Risk**: hyperinflation emerges during *de*flationary periods and is always preceded by budget deficits. (Central banks need to be wary of supporting government spending.)

Figure I.5 Keynesian Predicament Faced by the United States, European Nations, and Japan

Source: TRS

"How much money do I want to have in the financial system itself?" and "Am I adequately protected from government errors that could harm my wealth?"

Today's situation is singularly dire, but it won't last. Gold will never outperform stocks and bonds over the long run because it does not grow or produce a cash flow.* Hence, it does not make sense to hold the metal as a large part of an investment portfolio *most of the time*. But as

^{*}Gold is money, by strict monetary definition, but it will remain an investment comparable with stocks and bonds in our present monetary system so long as currencies remain unlinked with the precious metal. (The expansion of currency in circulation faster than the amount of gold production makes the value of gold rise; in other words, it becomes an "investment" whose price increases.) If we were to return to a gold standard, under which the money supply would only increase in line with gold entering central bank vaults, then gold would essentially be "cash" once again and offer no investment return.

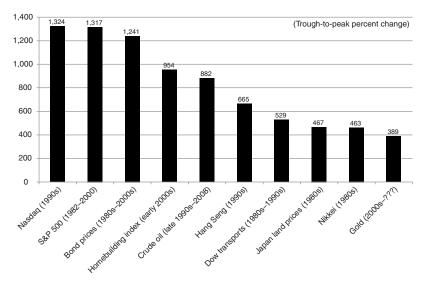


Figure I.6 Putting Today's Gold Rally in Context Source: David Rosenberg, Gluskin Sheff + Associates. Note: Gold's rally was calculated with gold ending at \$1,235/ounce.

we continue to work our way out of the global debt crisis, and considering the significant economic and financial challenges that most other investment classes face for the time being, you might share my belief that the price of gold is likely to rise substantially in the years ahead. I think we are in the early stages of a major gold rally (up 390 percent versus 2,300 percent in the 1970s), and we are not in bubble territory, judging by those that have occurred in other major episodes in the past. (See Figure I.6)

But there is more to gold than its being the latest investment fad. At this unique moment in financial history, investors should think about this peculiar asset, this unusual currency, carefully. Lacking a P/E ratio or some other traditional financial valuation metric to determine what the asset is worth per ounce, there are no reliable models to determine if it is "overvalued," something that has become enormously frustrating to Wall Street commodities specialists. Would gold be "expensive" if the world's investors, improbable though it may seem, wanted to transfer 3 to 5 percent of wealth out of cash and into hard money? If such a transfer were to take place, considering that a mere 0.5 percent of the

world's wealth is invested in the metal today, gold would surge into the tens of thousands of dollars per ounce. But if we reached that point, would it finally mean that gold had become insanely expensive, or simply that the world deemed the alternative—the printed paper debentures of profligate governments—as being far less desirable? Which currency is more trustworthy? Which one is the real money?

In the next five chapters, I discuss what I see as the major drivers of gold: the increasing likelihood of fiscal crises in major economies; the probable rise of inflation as a direct result of excess debt in the world; the significant potential for the world's largest funds to accumulate gold; a potential surge in Chinese demand; and changes in the world's monetary architecture that would make gold a vital asset once again. These drivers, if I am correct, would act on a minuscule asset class at the same time: Gold is, after all, a very scarce store of financial value, and squeezing its small supply might make it go hyperbolic. In Chapters 6 and 12, I also address two important questions for gold investors to consider: Are U.S. financial authorities actively regulating, that is, controlling the price of gold? Could the U.S. government once again restrict or prohibit gold ownership as it did between 1933 and 1974?

This book then takes a deeper look at gold investment by proposing the idea of a gold portfolio that nonprofessional investors can design for themselves, just as many do for their stock portfolios. Hence, it should be useful for those who are considering holding a larger portion of their overall wealth in gold, or others who want to enhance their existing gold investment, aiming for potentially higher returns. Setting up a gold portfolio allows you to customize your gold investments more deliberately and systematically, based on your own thoughts about returns expected as well as the risks being incurred.

Once you have decided, perhaps with the help of a financial adviser, what portion of your diversified investment portfolio should be in gold, Chapter 9 will help you walk through the essential questions any portfolio manager would ask to set up a gold portfolio: (1) How much of your portfolio do you want to hold in gold and how much in the more volatile silver, platinum, and palladium? (2) How much do you want to hold in ETFs versus mining stocks, which provide more leverage to the price of gold? (3) Should part of the portfolio be held in coins or bars, providing an outside-the-financial-system dimension to your precious

metals investment? Toward the end of the chapter, you will find examples of portfolios—some conservative, some aggressive bets on surging metal prices—that will give you a sense of the potential returns as well as the downside risk presented by the various exposures one can select.

But before considering the gold portfolio, let's look at some of the potential drivers of gold.

Notes

- The colleague was Patrick Cosgrove, the present European Equities fund manager at TRS. CIO Britt Harris had just assumed his new position. This meeting ultimately led to the creation of the GBI Gold Fund, which we launched in 2009.
- 2. Richard Duncan, *The Dollar Crisis: Causes, Consequences, Cures* (Hoboken, NJ: John Wiley & Sons, 2003).
- 3. Shayne McGuire, Buy Gold Now (Hoboken, NJ: John Wiley & Sons, 2008), 2.
- 4. My source of the latest figure on total U.S. federal liabilities is Boston University Professor Larry Kotlikoff, an expert on the subject, who told me in July 2010 that the figure had reached \$202 trillion.
- 5. Mohamed El-Erian, "How to Handle the Sovereign Debt Explosion," *Financial Times*, March 11, 2010. PIMCO is the world's largest bond fund manager.
- 6. Source: "Fund Management 2009," IFSL Research, October 2009.
- 7. Source: International Financial Services London (IFSL). This is based on a simple rounding of asset allocation percentages of holdings at pension funds in the United States, Japan, the United Kingdom, and Canada. A more precise methodology could be used, but the basic percentages would vary to a very minor degree.
- 8. Andrew Frye and William Selway, "Buffett Says He Expects 'Terrible Problem' for Municipal Debt," *Bloomberg*, June 2, 2010.
- 9. Stephen Cecchetti, Madhusudan Mohanty, and Fabrizio Zapolli, "The Future of Public Debt: Prospects and Implications," working paper 300, Bank for International Settlements, March 2010.

Part One

THE LOGIC OF HARD MONEY IN THE NEW INVESTMENT WORLD

Chapter 1

Gold Driver 1: The Increasing Likelihood of Fiscal Crises in Major Economies of the World

Adopting the euro is effectively irreversible. Leaving would require lengthy preparations, which, given the anticipated devaluation, would trigger the mother of all financial crises.

—Barry Eichengreen, professor of economics, University of California, Berkeley and former senior policy adviser, International Monetary Fund¹

Following banking crises, we usually see a bunch of sovereign defaults, say in a few years. I predict we will again.... It's very, very hard to call the timing, but it will happen.

—Kenneth Rogoff, professor of economics at Harvard University and member of the Group of Thirty, February 23, 2010²

"Ill sovereign debt be the new subprime?" was a stunning question posed by one of the editors of the Financial Times in late 2009.³ He was comparing the bonds issued by national governments to the subprime bonds linked to the U.S. residential market that sparked the global credit crisis of 2008, the worst since the Great Depression. But subprime real estate bonds were a very small part of the then \$22 trillion U.S. mortgage market, and a minuscule fraction of the total global financial asset market that existed in 2007. Sovereign bonds, such as the ones issued by the U.S. Treasury, are in a different category altogether for four important reasons that should make the potential for a sovereign crisis a key driver of gold investment in the years ahead.

First, sovereign bonds (which include U.S. Treasury bonds) represent the largest part of the \$83 trillion global bond market, the largest market of any kind in the world. (See Table 1.1, which shows bonds issued domestically) Total global government-issued bonds outstanding in 2009 amounted to over \$30 trillion, twice the size of the United States economy. (See the Public column in Table 1.1.) The whale's share of that amount is concentrated among the 10 largest economies, and the United States and Japan have issued more than half of the world's total sovereign debt outstanding today. The emergence of at least one government debt crisis is relatively common from decade to decade in smaller economies, like Argentina and Iceland in the one that just ended, and invariably warnings about unsustainable deficits and debt came years

 Table 1.1 Domestic Bond Market by Nationality of Issuer (in Billions)

	Total	Public	Financial	Corporate
United States	24,622	7,888	13,819	2,914
Japan	11,077	9,113	1,197	767
Italy	3,262	1,780	1,055	427
France	2,921	1,437	1,160	324
Germany	2,593	1,364	929	300
Spain	1,746	540	543	663
United Kingdom	1,223	827	378	19
Canada	1,035	670	254	110
Belgium	553	373	144	36
Others	10,634	5,795	3,795	1,045
World	59,666	29,787	23,274	6,605

Sources: Bank for International Settlements, International Financial Services London.

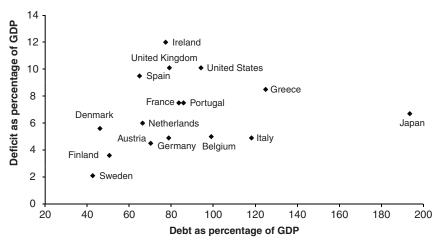


Figure 1.1 General Government Debt and Deficits as Percentage of GDP, 2010 SOURCES: European Commission, Credit Suisse.

ahead of eventual crashes. But the surge in truly alarming public sector leverage among the largest economies is a fairly new phenomenon, at least during peacetime.

The word *unsustainable* is increasingly being attached to the deficits and national debts of the United States, Japan, and the United Kingdom—countries that collectively account for almost half the world's GDP—and economists today frequently express great concern and for good reason. Figure 1.1 presents countries on a chart that positions them based on the sizes of their deficits and debts relative to the size of their economies. The United States, in particular, is shown to be very near Greece, a country in financial crisis: The American deficit and national debt are extremely high, and yet they do not include the weight of massive unfunded liabilities that will also need to be dealt with in the future.

If there is a problem in the sovereign debt arena, perhaps the credit crisis of 2008 was merely the introduction to something far more severe in scale. Following years of tremendous bond issuance (Figure 1.2), most of the major economies listed in Table 1.1 have serious debt challenges today. The United States, for one, will borrow 40 cents out of every dollar it spends in 2010. But its financing requirements are so large that it needs to fund a large portion of its obligations in foreign markets. In fact, most of the U.S. Treasuries bonds in circulation today are owned outside the country's borders, making the United States hugely dependent on other

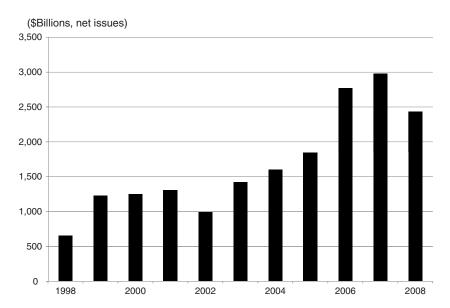


Figure 1.2 Soaring Bond Supply: International Bond Market Issuance, 1998–2008

Sources: Bank for International Settlements, International Financial Services London.

nations. But perhaps Japan is facing the most challenging situation. Its \$9 trillion in government bonds outstanding is larger than the amount of U.S. Treasuries outstanding, but Japan's economy is about a third the size of the American one. This makes Japan's debt as a percentage of its GDP the largest of any developed economy, placing it to the far right in Figure 1.1. Furthermore, its borrowing rates, at well below 2 percent for a 10-year bond, cannot realistically go much lower, so the clear risk is that rates will climb—making Japan's debt burden even more painful—unless it is able to constrain its debt levels.

This leads to the second reason to fear a government debt problem: Sovereign bonds are the obligations issued to finance the operations of governments everywhere, which would make a sovereign crisis a crisis of government. If Wal-Mart, the world's largest retailer, defaulted on a bond—or all its bonds outstanding—it's unlikely this would be disruptive to the world economy or even the United States. If it ceased to operate, people could buy goods at alternative retailers and Wal-Mart would probably reopen with different owners—its creditors. But if, say,

Greece defaulted on its bonds and was unable to fund its daily operations without external help, this would cause a national economic and banking crisis. The Greek government has millions of employees and a substantial part of the country's banking assets are held in government bonds, which would be falling sharply in value and impairing capital in the financial system. It would be a national catastrophe and foreign assistance would have to come from European governments or agencies like the International Monetary Fund (IMF) to prevent an economic catastrophe. However, if a sovereign crisis emerged in a significantly larger economy—one, like the United Kingdom, which is also a major international financial center—the catastrophe would extend beyond its borders and it would be difficult for relatively limited agencies—like the IMF, which mostly works with smaller economies—to help.

Third, sovereign bonds, as an asset class, are widely regarded today as the ultimate portfolio insurance. (As discussed in the Introduction, gold is not regarded as a major investable asset in modern professional asset management.) The quality of bonds issued by the world's leading economies has not been questioned for decades. To the contrary: investment advisors today invariably recommend that conservative clients aiming to protect their investments lend money to the government: "Buy bonds." Government bonds—particularly those of the U.S. Treasury, which has never defaulted—are *risk-free* by definition, a core holding at any major pension fund or insurance company. They are seen as the unquestionable rock-solid asset to cling to when the stock market gets rocky. Corporate bonds sink during bad depressions, and the 2008 crisis was no exception. However, government bonds rose in value, as they normally do.

But the perennial "no-brainer" recommendation that you should buy Treasuries "if you need 100 percent safety" may finally require use of a brain. What if, due to the continuing sluggish economy and need for even more government spending, deficits remain elevated and government debts climb even higher? This is actually what most economists are expecting will happen, mostly because there are large expenditures blowing from the future due to the coming retirement of large segments of the populations of the United States, Japan, and the United Kingdom. The safety of government bonds would come under even greater scrutiny and, should they begin to fall in value, would start to threaten the balance sheets of global pension funds and insurance companies. Consider that

pension funds around the world hold \$24 trillion and insurance companies \$19 trillion in assets. And there are hundreds, if not thousands of bond funds in the world that manage trillions more, a great many of which are large sovereign bondholders.

Finally, there is the risk that trouble in the bond market could harm the valuation of other bonds, as well as stocks and other asset classes. The so-called risk-free interest rate is one of the key components of the Capital Asset Pricing Model (CAPM). Although not without its problems, CAPM is the widely accepted theoretical underpinning for the valuation of all major financial assets, since it provides the discount rate to determine valuation, what stocks and other financial assets are actually worth. Strictly speaking, the risk-free rate, as the name implies, is the yield on a bond whose issuer will never default, which for the United States is the 10-year bond issued by the U.S. Treasury Department. However, considering the importance of the U.S. dollar in the global monetary system as well as the perceived stability of its government finances, the U.S. 10-year Treasury bond yield is also the foundational rate used to value most of the bonds in the world: When a Brazilian or Korean 10-year bond is issued, its price is generally determined in reference to the U.S. equivalent. But the U.S. 10-year Treasury bond yield is also the risk-free rate metric used in many valuation models for stocks, real estate, and many other types of financial assets in many countries. Consequently, if the risk-free rate began to rise, as a result of investors dumping U.S. bonds, it would harm the valuation of a great many assets in the world today.

The U.S. government's freedom from risk was severely undermined by the 2008 financial crisis. In what Morgan Stanley's chief global strategist called "the Great Swap," the U.S. government was forced not only to spend as consumers moved to save; it also had to swap its quality assets (Treasury obligations) for malodorous mortgage-backed securities and other assets of extremely poor quality to help banks cleanse their balance sheets and be able to lend again. Due to the severity of the credit crisis, the U.S. government was forced to undermine the quality of its balance sheet, which put the risk-free interest rate into question. Unfortunately, the crisis arrived just as government spending was about to begin to surge: On January 1, 2008, the first of 78 million Americans, members of the baby boom generation, began to retire and Social Security,

Medicare, and Medicaid expenditures are beginning to expand dramatically. As our leaders deal with these tremendous challenges, which present investment risks to U.S. Treasury bondholders, it is probable that some part of the trillions the world has invested in U.S. Treasury obligations will begin to move into gold.

Notes

- 1. Barry Eichengreen, "The Euro: Love It or Leave It?" voxeu.org, May 4, 2010.
- 2. Aki Ito, "Harvard's Rogoff Sees 'Bunch' of Sovereign Defaults," *Bloomberg*, February 23, 2010. The Group of Thirty is a panel of central bankers, finance officials, and academics headed by former Federal Reserve Chairman Paul Volker.
- 3. Gillian Tett, "Will Sovereign Debt Be the New Subprime?" *Financial Times*, November 23, 2009.

Chapter 2

Gold Driver 2: The Return of Inflation as a Major Investment Risk

A government expenditure has the same impact on the economy whether the expenditure is financed through current taxation or deferred taxation (debt). Moreover, any debt incurred by the government can be paid off either through future direct taxation or through inflation (that is, by decreasing the real value of the currency in which the debt is to be repaid). Inflation is thus a form of indirect—but very real—taxation.

—Laurence Siegel, research director, CFA Institute¹

hile gold can surge in value as an investment over the space of a few years, such as occurred in the 1970s (up 2,300 percent) or the 2000s (380 percent), over the long run the rise has been smoother as gold is simply a proven means of protection from inflation, a way to preserve purchasing power. Some critics of gold often cite brief periods of time, such as the 1980–1999 period when gold fell, to show that it has offered poor protection against inflation.² But gold's fixed supply ensures its defense against rising prices over extended periods because inflation is, in the words of economics Nobel laureate Milton Friedman "always and everywhere a monetary phenomenon". Since governments (and I'm including central banks as part of them) invariably increase the quantity of money in circulation more rapidly than the supply of gold rises each year—which is very little, typically around 1 to 2 percent—it follows that gold rises in value versus all paper currencies over time: Currency supply outpaces gold supply and the scarcer asset rises in value relative to the more abundant one. Or, put differently, gold's value remains relatively unchanged while the value of paper money falls over time. What proves this monetary fact is that every single paper currency in human history has lost value against gold. There is no exception.

Gold fell out of favor as an investment in the 1980s and 1990s partly because inflation began to decline rapidly from the double-digit levels of the previous decade. (See Figure 2.1.) With inflation under control, the economy began expanding and asset classes like stocks and bonds became attractive once again as interest rates began a steady decline. There was a sense during these prosperous times that the Federal Reserve and other central banks, which guide the level of global interest rates, had completely mastered the price level and that inflation was unlikely to jump by more than one or two percentage points from one year to the next. And while there was ample academic debate over whether inflation was being measured correctly-for example, some thought surging equity, real estate, and other asset prices were not being properly included in Fed inflation metrics-it has been decades since a wave of gold buying was ignited by concerns about inflation. If anything, there have been serious concerns about deflation, the threat that prices could fall, as occurred during the Great Depression and more recently in Japan. As you can see in Figure 2.1, inflation rates have been falling for quite some time, and

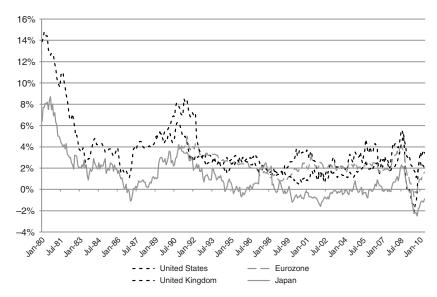


Figure 2.1 Annual Inflation Rates in Major Economies since 1980 SOURCE: Bloomberg.

Japan has actually been fighting deflation for decades and continues to do so at present.

Deflation, a rare economic phenomenon (as can be seen in Figure 2.2), occurs when the supply of goods and services in the economy is too large relative to the demand for them and typically surfaces after a protracted economic boom, such as the one that recently ended in the United States as well as the one leading up to the Great Depression. Its occurrence is highly disruptive to the economy because falling prices lead to increased unemployment, which can drive the economy into a downward spiral of contracting demand and eventually a severe recession or even a depression. Before the 1930s, when governments began actively using deficit spending to prevent demand from falling too sharply, economic authorities allowed the supply and demand balance to be restored by the brutal forces of the marketplace: Through the shutting down of businesses and a rise in unemployment, supply would contract until it eventually came into balance with lower demand.

Governments no doubt were concerned about the recurring, though relatively short, recessions and depressions occurring in the United States

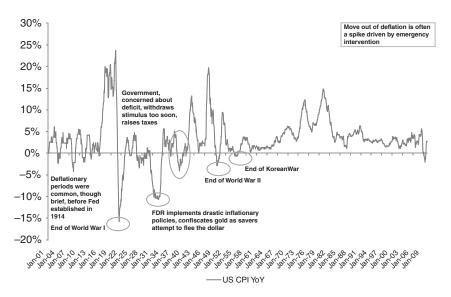


Figure 2.2 U.S. Inflation, 1901 to the Present Sources: Bloomberg, Datastream, Morgan Stanley, TRS.

during the late 1900s and into the early twentieth century, but putting the national balance sheet at risk was unthinkable at the time. Unlike today, deficit spending was seen as the road to economic ruin. During his first inaugural address in 1933, President Franklin Roosevelt, surely expressing the conventional wisdom regarding government finances of his time, said: "Revenue must cover expenditures by one means or another. Any government, like any family, can for a year spend a little more than it earns. But you and I know that a continuation of that habit means the poorhouse." But the president would soon change his mind.

As I discussed at length in my previous book about gold, the historical axiom that government and family books need to balance was debunked by the dire circumstances of the Great Depression. Regardless of the Depression's causes, which have been debated by economists—including Ben Bernanke, an expert on the topic—for decades, the severe contraction in demand caused the country's worst deflationary crisis on record. The chart in Figure 2.2, which shows the past century of price changes in the United States, gives a sense of the severity of the fall in prices in the 1930s and its deleterious effect on the economy: Unemployment eventually surged to over 25 percent.

One stunning example of the monetary emergency the country was living through is the fact that in parts of the country the price of corn went *negative* for some time: Farmers had to pay a distributor to take it off their hands.⁵ It was the brutality of an economic collapse never experienced before that forced leaders to think the unthinkable and consider long-shunned economic ideas, like deficit spending. The deflationary spiral had to end. And thanks to economists like John Maynard Keynes, in time it became acceptable for government to spend more than it received, at least during economic downturns. But in recent decades, virtually all major economies have had substantial deficits, even during economic expansions. Deficit spending has become a permanent fixture of macroeconomic policy.

Today, deflation is once again a significant threat to several major economies in the world, as excess capacity is evident throughout many sectors. (See Figure 2.3, which shows capacity utilization in the United States.) Unemployment is extremely high in many countries, a factor that hinders price increases across the global economy. Additionally, the sheer level of debt across the world—but primarily in developed economies—at the private and public level acts as a demand suppressant

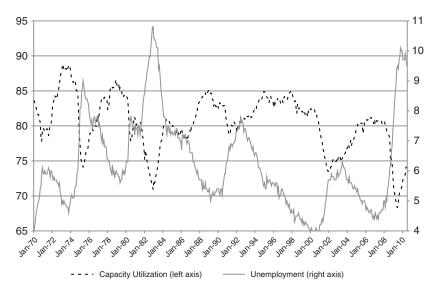


Figure 2.3 U.S. Capacity Utilization and Unemployment Rate, 1970–2009 SOURCE: Bloomberg.

to a significant degree. Furthermore, as seen in Figure 2.1, the inflation rate had already been falling steadily in recent years and we even had a deflationary scare in 2002.

Armed with the historical experience of having fought an intense battle with deflation in the 1930s, in 2008 the U.S. government (via massive deficit spending) and the Federal Reserve (by way of operations that effectively involved money printing) launched their complete fiscal and monetary arsenal upon the financial system in an effort to prevent deflation. The government, as it has done often before, was attempting to replace falling private demand with rising public demand in the economy. And our leaders were successful in preventing full-fledged deflation from occurring and the economy has rebounded. But the price paid was high as the deficit and national debt soared, and the downturn has been so severe that unemployment rose sharply despite the government's efforts. And so it went with other major economies, like Japan, the United Kingdom, and the European community, all of which have been left with tremendous deficits, debts, and high unemployment.

Now, in financial terms, markets are "priced" for inflation to remain low and perhaps even move into deflation: this is what is expected. And considering the tremendous excess capacity and unemployment levels present in the global economy, the *slack* that economists often refer to, it makes sense to believe that inflation is unlikely to surface anytime soon. This is perhaps the main frustration for economists who see little reason for gold's continued climb in the face of tremendous deflationary forces at play in the economy. ('Isn't gold supposed to be about inflation, and not *def*lation?') But the reason there is a significant risk that inflation could erupt—perhaps violently—in the years ahead is government debt.

A report published in early 2009 by Morgan Stanley pointed to data showing that 7 of the world's 10 largest economies, including the United States, had total debt representing more than 250 percent of gross domestic product.⁶ (See Figure 2.4.) The United States' debt ratio is substantially higher than that now, and Japan and the United Kingdom have already surged well over 300 percent. Although national debts have been climbing for many years now, the global economy was generally expanding in lockstep. But since the economy fell off a cliff in 2008 and is projected to grow at a modest pace over the next few years, those

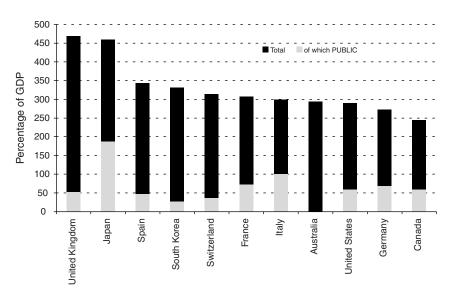


Figure 2.4 Total Debt to GDP for Major Industrialized Countries Source: Morgan Stanley.

debts have become alarming as growth is needed for them to be serviced. Furthermore, as Morgan Stanley's Chief Global Strategist put it, "there is no historical precedent" for an economy with debt greater than 250 percent of GDP to avoid financial crisis (or inflation) in its attempt to bring down the colossal debt level. Paying down debt when it has reached such a scale invariably requires a severe recession, as consumption contracts sharply so that savings can be destined toward creditors. And yet, considering the economic catastrophe the world has just lived through, there is little tolerance for economic pain at present. To complicate the situation further, there has been minimal deleveraging in many of the world's major economies up to now, mostly because government deficits and debts have been rising so rapidly.

High government deficits become an inflationary concern because, absent some supply shock (such as a spike in oil prices), historically they have tended to provoke an increase in prices throughout the economy. And in several important situations, rising deficits have led to hyperinflation, a situation of severe economic dislocation. Although the path of rising prices can vary from country to country, the logic for

why government excess can lead to inflation is straightforward: Rising deficits eventually reach a point at which governmental debt requirements become so large that the bond market is saturated and/or alarmed investors refuse to continue lending to the government—at least at low interest rates. At that point, unless leaders impose emergency spending reductions, they are forced to print money for spending, and more money in circulation leads to a higher inflation rate.

The Risk of Hyperinflation

Although inflation caused by government is known to have occurred as far back as the early days of the Roman Empire, there are only 30 documented cases in economic history of *hyper*inflation, defined as an inflation rate exceeding 50 percent per month. (See Table 2.1.) It is fortunately a rare event because hyperinflation essentially means, in blunt economic terms, game over: The value of savings collapses, financial markets shut down, there are runs on banks, capital flees the country, supermarkets run out of multiple food items, many gas stations shut down, unemployment surges, and severe recessions ensue. With the help of international organizations like the International Monetary Fund, it is possible for a country to recover economic and price stability relatively quickly, but at a new level far lower than existed before: The nation's standard of living has fallen and it takes many years for past affluence to return.

Peter Bernholz, professor of economics at the University of Basle in Switzerland, is widely regarded as one of the world's leading experts on hyperinflation, and his explanation for why it occurs is unambiguous: "Hyperinflations are caused by government budget deficits." There is no exception: Hyperinflation, meaning the emergence of an economic catastrophe, has *never* occurred without a huge budget deficit. And in each case of hyperinflation, the deficit amounted to more than 20 percent of public expenditures. ⁸

One doesn't need a PhD in economics to understand how these nations met their fate, because the cause is so straightforward: The countries listed in Table 2.1 arrived at their terrible predicament essentially because their governments, having exhausted the revenues needed

59

8.97 septillion

		• •	, .			•	
	Country	Year	Highest inflation per month (%)		Country	Year	Highest inflation per month (%)
1	Argentina	1989/90	197	16	Hungary	1945/46	12.95 quatrillion
2	Armenia	1993/94	438	17	Kazakhstan	1994	57
3	Austria	1921/22	124	18	Kyrgyzstan	1992	157
4	Azerbaijan	1991/94	118	19	Nicaragua	1986/89	127
5	Belarus	1994	53	20	Peru	1988/90	114
6	Bolivia	1984/86	120	21	Poland	1921/24	188
7	Brazil	1989/93	84	22	Poland	1989/90	77
8	Bulgaria	1997	243	23	Serbia	1992/94	309,000,000
9	China	1947/49	4,209	24	Soviet Union	1922/24	279
10	Congo	1991/94	225	25	Taiwan	1945/49	399
	(Zaire)						
11	France	1789/96	143	26	Tajikistan	1995	78
12	Georgia	1993/94	197	27	Turkmenistan	1993/96	63
13	Germany	1920/23	29,526	28	Ukraine	1992/94	249

Table 2.1 Hyperinflationary Episodes in World History

11,288

1942/45

1923/24

14 Greece

15 Hungary

SOURCES: Peter Bernholz, *Monetary Regimes and Inflation* (Northampton, MA: Edward Elgar Publishing, 2003); Steve H. Hanke and Alex K. F. Kwok, "On the Measurement of Zimbabwe's Hyperinflation," *Cato Journal* 29, no. 2 (Spring/Summer 2009).

29 Yugoslavia30 Zimbabwe

1990

2008

to meet their expenditures, ultimately decided to print money to pay their bills. The surge in money in circulation caused the value of goods, which became scarcer than the rising amount of currency notes and coins, to begin rising rapidly. Inflations then have a tendency to accelerate, Bernholz says, because the public tries to get rid of the depreciating currency, spending it as quickly as possible. Rapidly increasing inflation, not surprisingly, is highly disruptive to the economy as both creditors and businesspeople find it increasingly difficult to provide credit and price goods. And invariably, the consequences for financial markets are severe.

Judging by the graph lines in Figure 2.5, which show surging budget deficits for major economies, one could argue that conditions are present for an eruption of hyperinflation in the United States, the United Kingdom, and Japan, countries that collectively account for almost half of global GDP. Deficits, which had already been large and rising, shot

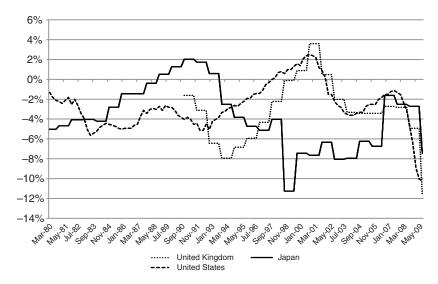


Figure 2.5 U.S., UK, and Japan Budget Deficits as Percentage of GDP, 1980–2009 SOURCE: Bloomberg.

up dramatically in 2008 as a result of the global financial crisis. Consider that the U.S. government's debt-to-GDP ratio surged a stunning 20 percentage points in a single year. The national debt rose 50 percent in four years. And yet governments have been unable to provide a credible explanation of how deficits—not to mention the trillions in debt—will be reduced in the years ahead, particularly considering the demographic challenges each country faces. Federal outlays to an increasing population of retirees will be *accelerating* over the next decade, particularly in Japan, which implies increasing federal spending. Furthermore, the global sovereign bond market of tens of trillions of dollars, large as it is, was not deep enough to absorb the massive amount of U.S., UK, and Japanese bond issuance, and this has required that central banks absorb a significant portion of issuance: These countries' central banks printed money to buy federal bonds.

That the world's major economies have surging deficits and debt does not mean that hyperinflation is about to erupt. An American real estate crash did not occur in 2003, which is when UCLA Professor John Talbott wrote *The Coming Crash in the Housing Market* (McGraw Hill Professional), but the conditions for the crash that took three more years

in coming were certainly present: Home prices were rocketing far more rapidly than incomes; families were cashing out billions in equity; and regulators, loan officials, and market professionals were ignoring troublesome signs. The conditions were present for a collapse of the housing market, just as today we have massive federal deficits across the world that provide the conditions necessary for hyperinflation to rear its head. Our leaders are faced with the need to slash expenditures and/or increase tax revenues to prevent an inflationary catastrophe from occurring. But as we wait for governments to form a credible path for the reduction of debts and deficits, it is likely that investment will continue to move into inflationary insurance instruments like gold.

Notes

- 1. Laurence Siegel, "A Riskless Society Is 'Unattainable and Infinitely Expensive," in *Insights into the Global Financial Crisis*, edited by Laurence Siegal, CFA Institute 2009, 12.
- 2. The period between 1933 and 1971 when gold was frozen at \$35 an ounce is also cited, but gold's price adjustment was merely delayed. The U.S. government sold thousands of tons of gold over this period to preserve the mirage that the dollar was strong. But what was happening is that leaders were rapidly depleting the American gold base as foreign governments, observant of accelerating U.S. deficit spending, cashed in their dollars for gold. The adjustment came in the 1970s, when gold rocketed up 2,300 percent in nine short years (double the speed of the 1990s NASDAQ as an investment), making up for lost ground.
- 3. Milton Friedman, "The Cause and Cure of Inflation," in *Money Mischief* (Orlando, FL: Harcourt Brace Jovanovich, 1992), 193. The italics are Friedman's.
- 4. Quoted from John K. Galbraith, *The Affluent Society* (Cambridge, MA: Riverside Press, 1958), 17.
- 5. Studs Terkel, *Hard Times: An Oral History of the Great Depression* (New York: Pantheon Books, 1970), 245.
- 6. Gerard Minack, "Downunder Daily: It's Simple: Too Much Debt," Morgan Stanley report, February 17, 2010.
- 7. Peter Bernholz, Monetary Regimes and Inflation: History, Economic and Political Relationships (Northampton, MA: Edward Elgar Publishing, 2003), 69.
- 8. Ibid, 71.

Chapter 3

Gold Driver 3: The Return of Gold as a Significant Asset in the World's Largest Investment Funds

espite the surge in financial risk during what became the Great Recession, less than 1 percent of global financial wealth is invested in gold today. A historical anomaly, gold—widely regarded today as a volatile *risk asset* among financial professionals—is virtually absent in the largest investment portfolios, most notably global pension funds and insurance companies, which protect trillions of dollars of the world's wealth. This lack of financial insurance did not go without notice when the value of all major investment asset classes—stocks,

corporate bonds, real estate, industrial commodities, alternative investments—plunged together in 2008 and multiple financial firms, including the world's largest insurance company, sank into bankruptcy while gold climbed in value (see Table 3.1). In time, many would realize that the other major asset class that rose in value, sovereign bonds of the world's strongest economies—most notably, U.S. Treasury bonds—was doing so in part because the biggest investor of them all was in the market: central banks were buying their respective governments' bonds with freshly printed money.

Even though gold has been in a bull market for several years now, the world's fund managers and asset allocators—persons who make multibillion-dollar decisions regarding the correct mix of stocks, bonds,

Table 3.1 Performance of Major Asset Classes, 2008

Name	2008 Performance
S&P 500	(37.0%)
Russell 1000	(37.6%)
Russell 2000	(33.8%)
MSCI US REIT	(38.0%)
MSCI AC World	(42.2%)
EM Asia	(53.0%)
EM Latin America	(51.4%)
EAFE & Canada	(43.6%)
U.S. Treasury Bonds	13.7%
Japan Government Bonds	3.7%
U.S. TIPS	(2.4%)
EM Government Bonds	(6.9%)
U.S. Investment Grade Credit	(3.1%)
Commercial MBS	(20.5%)
U.S. High Yield	(26.2%)
Global Hedge Fund Index	(23.3%)
Money Market	1.8%
Crude Oil	(53.5%)
Copper	(54.2%)
Agriculture	(28.9%)
Silver	(23.0%)
Gold	5.8%

Source: Bloomberg.

and other assets in global portfolios—have struggled with a seemingly difficult question: How can one regard gold, which does not produce a cash flow stream like stocks and bonds, as a promising asset to hold in a portfolio? A century ago, a financial asset manager would have responded that gold is money, a time-tested preserver of wealth, while the dollar and other currencies merely *represent* money and the value of all of them has fallen against gold over time. Considering the risk of banking system failure, government bankruptcy, war, and other sources of financial distress that cause the values of multiple paper assets to become suspect and fall—often very sharply—it makes sense to hold some fraction of financial assets in gold as a matter of prudence and financial principle.

But today's asset managers' disdain for the ultimate financial insurance policy is reflected in the negligible position that gold holds in the bulk of the world's largest investment funds, a point I return to in Chapter 6. It is safe to say that of the 20 largest U.S. retirement funds shown in Table 3.2—which collectively manage trillions of dollars of the nation's wealth—less than a third of one percent of each one's holdings are in gold. And only Teacher Retirement System of Texas has a fund dedicated specifically to a gold investment strategy.

Though optimism cautiously returned to markets in 2009, few financial professionals would deny that the investment horizon we face is fraught with peril. Most of the U.S. auto industry and large swathes of the financial sector have collapsed and been nationalized. Fannie Mae, Freddie Mac, AIG, and Citigroup, with trillions of dollars in assets, are government-run entities today. So is the Royal Bank of Scotland, whose assets made it the world's largest bank before its equity vanished. Long after the fall of Lehman Brothers, which prompted the worst financial crisis in decades, as of this writing on Fridays the Federal Deposit Insurance Corporation (FDIC) is still announcing the failure of at least one more bank, and often three. Meanwhile, the U.S. economy is relying increasingly on the ever-borrowing government for growth, which is desperately needed to bring down the unemployment rate. With the continual entrance of new job seekers to the work force, an economic expansion rate of at least 3 percent per year is needed just to keep the jobless rate stable at a very high 10 percent. Substantially higher growth is needed to actually reduce unemployment. To make things worse, U.S. total debt as a percentage of GDP is at its highest level ever.

Table 3.2 The Top 20 Pension Funds in the United States (Ranked by Total Assets, in US\$ Millions, as of September 30, 2009)

Rank	Sponsor	Assets
1	Federal Retirement Thrift	\$234,404
2	California Public Employees	\$198,765
3	California State Teachers	\$130,461
4	New York State Common	\$125,692
5	Florida State Board	\$114,663
6	New York City Retirement	\$111,669
7	General Motors	\$99,200
8	Texas Teachers	\$91,358
9	AT&T	\$80,206
10	New York State Teachers	\$77,640
11	IBM	\$77,321
12	Wisconsin Investment Board	\$73,096
13	Boeing	\$71,135
14	North Carolina	\$70,815
15	New Jersey	\$68,698
16	Ohio Public Employees	\$67,650
17	General Electric	\$58,300
18	Ohio State Teachers	\$58,236
19	Washington State Board	\$56,709
20	Oregon Public Employees	\$51,516

Source: Pensions & Investments, February 8, 2010.

Considering these difficulties, there are several important reasons why I think the world's largest investment funds will increase their gold investment substantially in the years immediately ahead. For one, as mentioned earlier, the starting point is essentially zero: Investment funds, after participating in the deepest, longest stock and bond market rally ever experienced, between 1980 and 2007, have been left with a negligible exposure to precious metals and a large exposure to struggling asset classes.

It is rational to believe, taking into account the demographic and economic challenges the world faces at present, that funds are unlikely to increase their exposure to equities, considering that the typical pension fund holds a historically high 60 percent of investment assets in stocks

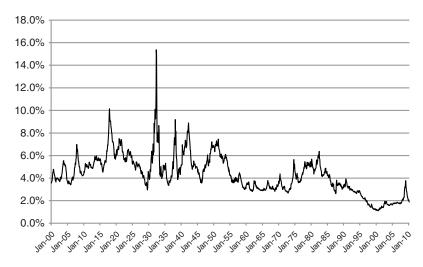


Figure 3.1 S&P Dividend Yield, 1900–2009 Sources: Robert Shiller, Ned Davis Research, Barra, Standard and Poor's, Ibbotson, Thomson Financial, Morgan Stanley Research.

today. Although equities have gone nowhere in a decade, the S&P 500 Index is still almost twice as expensive as it was when the stock market boom began in the early 1980s: The price-to-earnings ratio at the trough in 1980 was in the single digits compared with 15x today, which is above the historical average. Stocks' dividend yield was once a key determinant of valuation, but is not surprisingly ignored today with the yield on the S&P 500 being a mere 2 percent compared with over 4 percent in 1980. (See Figure 3.1.)

It is financially axiomatic that stocks are a core asset to hold for the long run—at least for long-term-oriented investment entities like pension funds, which can ride out lengthy periods of poor performance. But considering the not particularly attractive valuation of stocks at present coupled with economic risks not seen in generations, the key question for the asset class—particularly from the individual investor's perspective—becomes: Are stock investors being properly compensated for risk?

If not, fixed income, the alternative broad asset class, faces significant challenges of its own primarily as a result of governments in fiscal trouble. Of the total bond holdings at any large, diversified fund, government-issued bonds tend to hold the largest position, above

corporate and other types of fixed-income securities. As sovereign bond supply continues to rise with global government spending, it would be natural for the world's largest funds to begin diversifying away from bonds being issued like never before to fund deficits that have surged in recent years. It could be prudent to do so, all other things remaining equal, now that rating agencies have begun to express concern about the speed and degree to which budget deficits have soared while tax revenues have fallen sharply. Although massive bond issuance won't necessarily mean the bond market is in trouble, there is only so much that large funds can absorb, and central banks are likely to continue *monetizing* the excess—that is, printing money to buy whatever sovereign bonds the market can't or won't absorb.

This is not an attempt to explain why the world's largest funds are about to dump stocks and bonds en masse, an extremely unlikely event. Large pension, endowment, and insurance company funds have a very long-term investment horizon that allows them to endure periods of investment stress, maintain exposure to unfavored asset classes, and be prepared for the rebound, which always arrives eventually. However, the present environment is far more challenging than any seen in generations, and I am merely pointing to reasons why asset allocators are likely to continue moving a portion of investment funds into gold and other precious metals by default: If sovereign bonds are becoming an increasing source of investment concern, other asset classes will be affected, as well, and gold should rise simply because some funds will make their way into the tiny investment class.

Whether the funds drawn from stocks, bonds, and other asset classes, like real estate and private equity, is a mere 1 percent or 5 percent of total assets is less important than the fact that the movement takes place. This is because the precious metals market is so small that a relatively minor increase in investment has a tremendous effect on prices. Consider that all the investments in gold exchange-traded funds (ETFs) represent less than 0.15 percent of global assets under management. (See Figure 3.2.) If 1 percent of global assets under management, approximately \$610 billion, went into gold, this amount would represent 8 times what the mining industry produces in a single year. If one pulled out the gold that goes to jewelry demand, the amount left for investment would represent an even larger portion of what miners produce per year.

(\$ Billions)		
Global gold ETF holdings (worldwide)	\$	65
McDonald's market cap	\$	75
Bond market of Belgium	\$	553
Global bond market	\$85	5,000
Global pension fund assets	\$24	4,000
Global fund management assets	\$63	1,000
Gold ETFs as % of global fund management assets	0	.11%

Figure 3.2 Gold Exchange-Traded Funds in Comparison with Other Assets Source: Bloomberg, IFSL, Teacher Retirement System of Texas.

And this is the key point of this chapter. It's not that gold is going to replace equities or bonds; that is not going to happen. Unless the investment world is about to turn upside-down, gold is not going to grow to become 25 percent of fund assets. It would be absurd for a fund manager to think that gold could be a strategic asset that could outperform stocks over decades. But if asset managers increased their gold investments to 1, 2 or 3 percent of assets under management, the impact on the minuscule precious metals market would cause gold to soar into the thousands.

Chapter 4

Gold Driver 4: The Rise of China

nvestors who think gold is for extreme financial pessimists should look to Asia, which is now a key driver of the world economy, and where the precious metal is widely regarded as a basic savings asset. The region's long history of currency turmoil, during which gold has risen against all variations of paper money, has invariably influenced the widespread perception that owning some gold is a rational decision. Rising Eastern demand for hard money is one of the main reasons why gold outperformed many stock markets, including the S&P 500, during the 2002–2007 rally as Asians have accumulated gold during the 2000s. And continuing demand—most notably from China—helped gold rise to new records in late 2009, despite the recent recession. The rising affluence among citizens of India, China, South Korea, and other countries, where people tend to have far higher savings rates than in Western nations, has contributed to booming demand for precious metals.

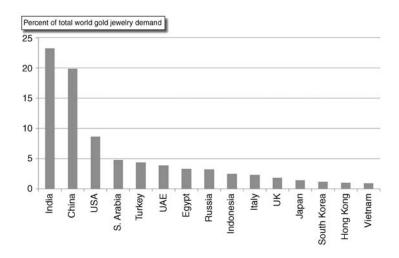


Figure 4.1 Total World Gold Jewelry Demand Source: World Gold Council.

The frequent demand for gold in the form of jewelry rather than bullion reflects a cultural preference for wealth that can be worn, which makes it difficult to ascertain the precise drivers of demand. Gold has been a part of India's financial culture for thousands of years, and the country has long been the largest gold jewelry market in the world, where the roughly 500 tonnes in annual demand is larger than that of all Europe and double the amount gold consumers purchase in the United States. (See Figure 4.1.) While most of global gold demand comes from jewelry, in the case of India—and other Asian nations—it is hard to answer the question, how much is a gold bracelet buyer thinking about how well it will look on a wrist and how much is he or she seeing it as a vehicle for storing wealth?

During the past decade, the most dramatic changes in the Asian precious metals world have occurred in China. In just four years, Chinese mines have risen to outpace the world's three leading producers—the United States, South Africa, and Australia—to become the largest gold suppliers to world markets. But it is not only Chinese gold supply that has surged: In 2007, China rose to replace the United States as the second largest gold jewelry consumer in the world. Despite the recession, which

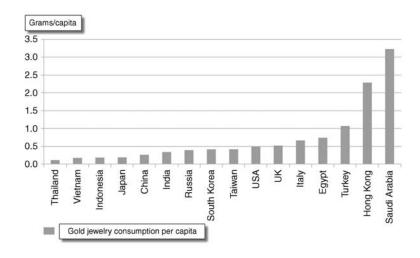


Figure 4.2 Gold Jewelry Consumption per Capita Source: World Gold Council.

caused jewelry demand to fall sharply in the United States, Chinese demand continued to rise, which helped compensate for weaker demand in other Asian nations. The rise in Chinese demand for gold is not only a result of China's continuing strong economic growth: A 2010 World Gold Council (WGC) study points out that, although China is the second largest consumer of gold in the world, on a per-capita basis Chinese citizens' ownership of gold is quite low by international standards.¹

Even though China's share of global gold demand doubled in just seven years—from 5 percent in 2002 to 11 percent in 2009—the WGC report says that Chinese consumption is significantly below that of other countries, like India, Taiwan, and Hong Kong, which also have gold cultures, as can be seen in Figure 4.2.* As China's population and incomes rise, gold consumption should continue to increase as well, though from a lower starting point, which implies that the increase should come at a faster pace than what has been seen in other Asian nations. As a result,

^{*}Although Hong Kong has been part of China since 1997, under the "one country, two systems" principle, it is governed under its own economic and political rules.

the WGC believes China's gold consumption could potentially double over the next decade.

Though Chinese interest in owning gold as jewelry or for investment purposes has always been strong, based on the country's history, authorities had tightly regulated the availability of the precious metal for consumers until recent years. Importing and exporting gold required authorization from the People's Bank of China and imports were taxed at a steep 60 percent rate, which virtually eliminated competition for local producers. But during the late 1990s, authorities began loosening the reins on the gold market, and following China's entry as a member of the World Trade Organization in 2001, the Shanghai Gold Exchange was set up in 2002 to replace the central bank's control over purchase and allocation.³ But it was not until the past few years that several major gold investment milestones were reached: In 2006, Zhongjin Gold Corporation and the WGC introduced the first gold investment bar into the market, a move that prompted Chinese commercial banks to begin offering gold-linked accounts and physical investment vehicles.⁴ And it was not until 2008 that the country introduced its first gold futures contract, which is remarkable considering that gold futures trading has existed for more than a century in Europe and the United States. Gold futures will not only allow Chinese producers to hedge gold price risk, but will also let gold investors gain a new leverage tool, as well.

While consumers and investors are being allowed to participate in the gold market in new ways, perhaps the most important impact that China could have on the price of gold will result from decisions made in the years ahead by its central government. In an effort to maintain a weak currency, a vital aid to the nation's colossal export sector, Chinese leaders have amassed the single largest monetary deposit ever imagined. The foreign reserves of China have reached \$2.4 trillion dollars, an amount that is roughly half the size of the country's annual GDP. (Consider that for the United States and the European Union, reserves are less than 3 percent of GDP.)

Just as remarkable is the speed at which the reserves have been accumulated. During the first three months of 2007, when Chinese holdings were about half their level today, the country added more reserves in a single quarter than all the central banks of the world had accumulated in 1987 during an entire year. (See Figure 4.3.) Considering the dollar's

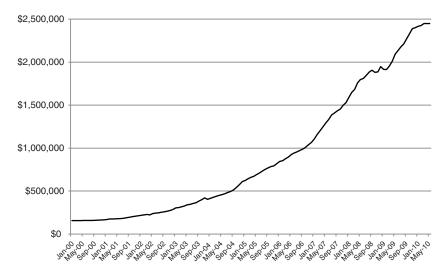


Figure 4.3 China Foreign Exchange Reserves (\$ Millions), 2000–2010 Source: Bloomberg.

position as the premier central bank asset, not surprisingly most of China's holdings are in dollar-denominated instruments, a fact that has caused some concern among not only the country's leaders but the population, as well.

In just the past year, China has begun to actively move part of its reserves into gold. During the summer of 2009, China surprised the markets by announcing that it had increased its gold reserves by 76 percent. Then, in February 2010, the government-controlled China Investment Corporation, China's sovereign wealth fund, announced its first investment in the SPDR Gold Trust Shares (the largest gold ETF) in the amount of \$155 million, which made it one of the 20 largest investors in the ETF, placing it in a league that includes Soros Asset Management and John Paulson. And yet, despite these large investments, gold represents less than 3 percent of China's total reserves.

China has 1.3 billion citizens, and its per-capita consumption of gold is among the lowest of the world's largest economies. Considering the country's size, its level of economic growth, the high savings rate of its population, and the large reserve holdings of its central bank, perhaps China's demand for gold will soon rise to match the demand it has for other resources. As shown in Figure 4.4, China today absorbs 11

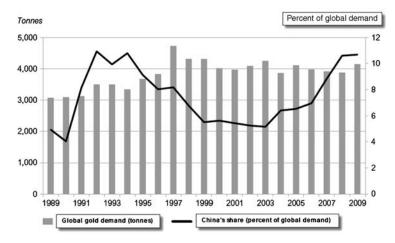


Figure 4.4 Global Gold Demand, 1989–2009 Note: China gold consumption figure excludes People's Bank of China purchasing.

Source: World Gold Council.

percent of the world's demand for gold. But a glance at the next chart in Figure 4.5, which compares China's demand for gold along with other resources, shows that this demand is modest in comparison.

The global supply of aboveground gold available for private investment, central bank reserves, jewelry, and industrial use grows at around 1.5 percent per year. Even though Chinese mine production has been

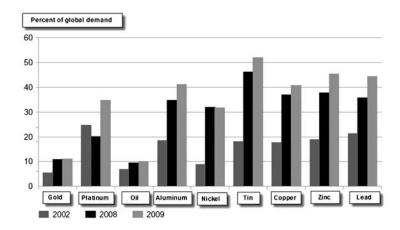


Figure 4.5 China's Market Share of Demand for Gold and Selected Commodities Source: World Gold Council.

rising extremely rapidly in recent years, it has not been sufficient to compensate for the continual production decline seen in other major gold regions, most notably South Africa. If Chinese demand for gold and other precious metals continues to grow at a pace substantially higher than supply is growing, one should expect the Asian nation to be another key driver of gold prices in the years ahead.

Notes

- 1. "China Gold Report: Gold in the Year of the Tiger," World Gold Council report, April 2010.
- 2. Ibid.
- 3. Ibid.

Chapter 5

Driver 5: Gold's Potential Return to Being the Dominant Financial Asset in the Global Monetary System (A Return to Normal)

The main thing we miss today is universal money. Gold fulfilled this role from the time of Augustus to 1914. The absence of gold as an intrinsic part of our monetary system makes our century, the one that just passed, unique in several thousand years. . . I firmly believe gold will be a part of the international monetary system sometime in the twenty-first century.

—Robert Mundell, Nobel Laureate in Economics, Nobel Prize acceptance speech, December 8, 1999

hat would it take, what calamity or threat to our national security would be at hand, for the Secretary of the Treasury of the United States to order that the stock market be shut down? The last time the stock market did not open, two of the largest buildings in the world were collapsing in flames and the Pentagon was under attack on September 11, 2001. What would it take for the Treasury secretary to go a step further and impede any activity on the stock market for another four months?

Almost a century ago, in 1914 the Secretary of the Treasury did just that as the first shots of World War I were being fired across the Atlantic. In a key decision that would contribute to American international monetary supremacy in the future, Treasury Secretary William McAdoo ordered a suspension of stock market activity, not primarily out of concern that events unfolding in Europe could cause a financial panic in America. He shut down the stock market to protect the nation's gold.¹

Such a move to shield the tangible monetary base of the United States would be incomprehensible in today's environment—because our monetary base is no longer backed by a tangible store of value. It is *flexible*. The notion that money's value should be held "outside the scope of government action," away from the hands of error-prone human beings taking risks with a country's prosperity, is long gone.² Central bankers can print money—trillions of dollars' worth in a single year—almost on a whim, over worries of deflation or some other transitory concern. And today, central bankers print money to fund the deficits of world governments.

But back in 1914 (coincidentally, the year in which the Federal Reserve began operations), the dollars in the economy were forcibly linked to gold and consequently could not be made out of thin air. Governments had to maintain balanced budgets because central banks could not be relied on to fund spending: Our authorities' fiscal hands were tied. As part of the financial culture of the time, it was a rule of thumb that 40 percent of U.S. dollars in circulation had to be backed by gold.*

^{*}Today the United States is the largest holder of gold in the world, by far. (It is worth mentioning, however, that some question this fact. Conspiracy theorists take note: The U.S. gold holdings have not been audited and no independent observers have been allowed into the Fort Knox gold depository since the 1970s to verify its contents.) Unfortunately, if the federal government ever decided to cash in the over 8,000 tons of gold held by the U.S. Treasury (no doubt after a long, painful debate in Congress), the proceeds would barely cover one month of federal spending.

For every dollar in circulation there had to be 40 cents in gold in a government vault, and dollars were essentially exchangeable for gold and silver on demand at a fixed price. What this meant is that a contraction of U.S. gold supplies (which would have occurred if the stock market had remained open in the summer of 1914) would cause a fall in the country's money supply, which slows down economic activity and can lead to a recession. Gold had to be protected and each country wanted to increase its gold holdings, since higher levels tended to drive economic activity higher.

This gold standard—followed by a modified version that would exist between 1945 and 1971—was not without its defects, which are stressed in numerous books and articles by many modern economists. It is the conventional wisdom today that obsessive adherence to the gold standard contributed to both the severity and the duration of the Great Depression.³ And it was this sense that gold was a "barbarous relic" of some primitive financial era that in time would lead the world's monetary authorities into outright selling of gold.

During the 1980s and 1990s, when the dollar was strong and faith in the stock and bond markets became extreme, European nations went on a gold-dumping rampage, selling millions of ounces in gold, the proceeds of which were invested in assets like U.S. Treasury bonds. "Whereas gold used to be seen as a good asset, it is now seen as the bottom of the pile," Bank of England Governor Eddie George told a European parliamentary committee just two years before England sold almost the last of its gold—at the lowest price in two decades. 4 But Europe's selling zeal was eclipsed by such nations as Australia (ironically, one of the world's leading gold producers), which had sold two-thirds of its gold by 1997, and Argentina, which proudly sold all its gold reserves in that year and invested the entire proceeds in Treasury bonds of the United States. Over the past four decades, a great number of the world's central bankers—the men and women in charge of the value of money—collectively, by their actions, have been making the world believe that gold is essentially useless as a store of value.

They replaced gold with the U.S. dollar, which is now the most important asset in the world's central bank vaults, the de facto foundation of the global monetary system. (See Figure 5.1.) As recently as 1980, gold represented roughly half the world's monetary reserves, but today the metal is barely ten percent. Now more than 60 percent of the ocean

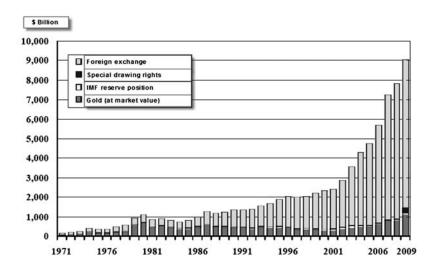


Figure 5.1 Composition of Global Monetary Reserves, 1971–2009 SOURCE: CPM Group.

of foreign reserves in the global monetary system, as shown in Figure 5.1, are in dollars and dollar-denomitanted assets. As such, the dollar is not only the measuring tape by which all other currencies are valued; it is also the largest and most important asset in the monetary vaults of virtually every country in the world. The dollar is the world's money. But what does that mean?

As the most important reserve asset, the dollar is accepted everywhere in virtually any quantity and to settle virtually any debt. As such, it seemed rational for countries to replace gold reserves with dollar-denominated assets over the past four decades, but their leaders perhaps did not consider the effect on the United States, which was to drive up its debt. Since all major economies were lenders to the United States—meaning they were willing buyers of U.S. bonds of every stripe—human nature being what it is, Americans have taken advantage of this "exorbitant privilege" and have become the willing borrowers from the world on an unprecedented scale. In time the United States' borrowing zeal made it rise to absorb the majority of the world's net savings to fund its current account deficit. To say nothing of the government, whose liabilities have soared, American consumer debt doubled in just seven years in the decade of the 2000s. (See Figures 5.2 and 5.3, which show the dimension of American private and

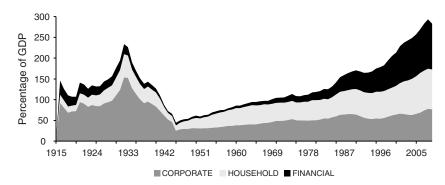


Figure 5.2 American Debt as Percentage of GDP by Private Sector, 1915–2008 SOURCES: Morgan Stanley, Federal Reserve, Bureau of Economic Analysis.

public debt.) By 2006, before trillions in emergency spending would be incurred during the credit crisis, the St. Louis Federal Reserve published a paper entitled "Is the United States Bankrupt?" The United States, the monetary foundation of the world, the issuer of the world's money, has liabilities that exceed its assets.

The transfer of global financial trust from gold (a monetary asset whose quantity and quality cannot be altered by human action) to the U.S. dollar (whose value is increasingly being threatened by a rapidly

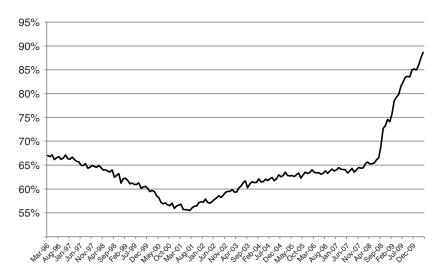


Figure 5.3 Total U.S. Public Debt Outstanding as Percentage of GDP, 1996–2009 SOURCE: Bloomberg.

weakening federal balance sheet) may turn out to be one of the biggest financial mistakes in human history. As the world's money, the dollar must be (1) a store of value (one that maintains purchasing value over time), (2) a standard of value (a widely accepted metric), and (3) a medium of exchange. But if the world loses faith in the dollar, which necessarily reflects the ability of American politicians to fulfill American obligations, then the dollar will lose the first characteristic of money and the world will need a new form of money as its foundation. The loss of faith, which has been building steadily in the rapid ascent of American federal liabilities in recent years, would likely be sudden and the damage to the global financial system unquantifiable: The world would simply begin dumping dollar-denominated assets.

Currency crashes have been rather common over the centuries of our financial experience, and most countries have experienced them—even the United States—with the consequence of severe inflation and deep recession.⁷ Although gold is often criticized in financial circles because it does not produce a cash flow, what all monetary historians understand is that the precious metal has risen in value in every single credit and monetary crisis in world history. Or rather, it has preserved its monetary value as others have fallen, time and time again. Under political and economic stress, paper currencies begin losing the characteristics of money because governments are invariably forced to attempt to print their way out of crises: Obligations are met, but with money of lesser value, and gold's price invariably rises.

All currency crashes have been preceded by deep government deficits—such as we have in the United States and throughout the world today—that ultimately became so large that creditors turned off the debt faucet. And there is a reason why gold (and, for some nations, silver) was the core monetary reserve asset in the monetary system throughout most of history: When a crisis arrives, large gold reserves are the proven asset to prevent a currency's collapse.

Impossible as most central bankers would regard such an astonishing transformation—to back global wealth with a physical store of value as opposed to zero-cost colored pieces of paper printed by government—this would simply be a return to normal in the centuries of monetary history. All currencies have fallen against gold, which is why the metal used to be the central banker's reserve of choice. This is

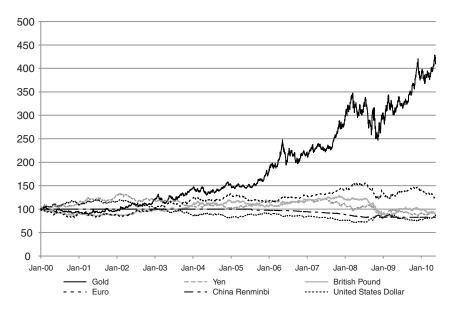


Figure 5.4 Gold versus Major World Currencies, 2000–2010 (Indexed at 100) SOURCE: Bloomberg.

occurring again at present, as gold is rising against all currencies without exception. (See Figure 5.4.) Today the U.S. dollar, the value of which Chinese leaders openly question, represents more than 60 percent of global monetary reserves. If the dollar fell, gold would be the main contender to replace it as the center of the monetary universe by default: It is the only financial asset that can be trusted because its value cannot be manipulated by any government. And there would be a rush to acquire the metal.

Notes

- 1. This is described in William Silber, When Washington Shut Down Wall Street: The Great Financial Crisis of 1914 and the Origins of America's Monetary Supremacy (Princeton, NJ: Princeton University Press, 2007).
- In 1966, French Finance Minister Valéry Giscard d'Estaing defined gold as the "only monetary element outside the scope of government action." Robert Solomon, *The International Monetary System*, 1945–1981 (New York: Harper & Row, 1982), 72.

- 3. See, for example, Barry Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (New York: Oxford University Press, 1995), which is perhaps the most important book regarding gold and its economic effects during the Great Depression.
- 4. Kenneth Gooding, "Death of Gold," *Financial Times*, December 13, 1997. I would like to thank John Hathaway for pointing out the importance of this article.
- 5. This term was used to by French Finance Minister Valery Giscard d'Estaing in 1965.
- 6. Lawrence Kotlikoff, "Is the United States Bankrupt?" Federal Reserve Bank of St. Louis, July/August 2006.
- 7. These occurred during the American Revolution (1774–1783) and the Civil War (1860–1865).

Chapter 6

Gold: How a \$10K Gold Is Possible (Taking a Closer Look at Supply and Demand)

espite the financial challenges the world faces at present, most investors would find it unlikely that gold could climb to \$10,000 an ounce, that it could go hyperbolic and rise tenfold from the average price in 2009. This chapter aims to explain why surging to such a level could take place, considering the present state of the metal's supply and demand and also looking back to gold market dynamics in the 1970s, the last time the metal rose so dramatically. As

the stock and bond markets struggled, gold jumped 2,300 percent over the nine years ending in 1980, and the metal's price spiked over several periods as it advanced to a peak of \$850 an ounce. Hence, there is a precedent for gold to rise so sharply and rapidly.

Before looking more closely at the supply and demand of gold, I think there are two important considerations for investors. First, I'm going to go out on a limb to say I believe gold can be regarded as the youngest major investment asset class—more novel than stocks and bonds, which have traded for centuries—and that this has very important investment implications. Stay with me now. Evidently, gold has been a store of financial value and means of exchange since such a concept came into human consciousness at least 6,000 years ago; it is not new in that sense. What I mean is that gold is new in that it is only since the early 1970s that it started being broadly perceived as an *investment*.

Before 1971, when the Bretton Woods monetary system collapsed as President Richard Nixon effectively took the dollar off what remained of the gold standard, gold was *money*, by definition, and currencies were receipts that represented and were exchangeable for hard money.* What we think of as money, the paper bills in our wallets and the coins in our pockets, used to be backed by—that is, exchangeable at a fixed rate of conversion for—a tangible store of value, which was gold in most countries and silver in some. Today all currencies are *fiat* currencies, no longer backed by gold or silver. The many Wall Street studies that evaluate gold as an investment over the past 100 years make little sense: Gold was frozen at \$35 an ounce for four decades. In fact, it was *illegal* for American

^{*}Money is defined as (1) a medium of exchange, (2) a standard of value, and (3) a store of value, requirements that gold has met throughout human history. In practice, under the Bretton Woods system the dollar acted as the world's money and exchange rates were set relative to the U.S. currency. But the dollar could be exchanged at any time by the world's central banks at a fixed exchange rate of \$35 an ounce, which meant that the dollar was tied to gold. Any central bank could hold gold instead of dollars and, in fact, it was doubts about the dollar and massive exchange into gold during the late 1960s, especially by France's central bank, that ultimately led President Nixon to shut the gold window. Gold and silver were unquestioned money for roughly 99 percent of the span of human civilization; the dollar, as a fiat currency, has been regarded as money for the remaining one 1 percent of that time. Despite the paper dollar's rise to becoming the world's most important currency, it is young as a monetary experiment.

citizens to even own gold bullion between 1933 and 1974. Evaluating it as an investment over this time period would be like examining the return on investment of a dollar bill: Both moved in lockstep by government decree. And before the Great Depression began, gold traded at roughly the same price per ounce since the time of the Civil War. How could gold be an investment if its value was not moving?

Gold has increased in value over long periods of time against all currencies, and over history the metal has certainly been an investment for the small minority of persons involved in gold mining and speculation, and trading at gold exchanges around the world. But in the developed world—primarily much of Europe and the United States over its relatively brief history—governments aimed to ensure that gold was valued at a fixed rate against paper currency thereby preventing it from being an investment. Whenever gold rose in value, it was generally as a result of an economic shock often provoked by war, when large numbers of people rushed to dump any paper currency (much of it issued by private banks) for gold. They did so in anticipation of the inflation—driven by the deficit spending that inevitably accompanies war and severe economic dislocation—that always arrived.* As a result, the price of gold would rise to a new level, but even during these periods of financial stress, nobody was investing in gold. People were hiding in and accumulating savings in gold, the way they hide in cash to move away from volatile financial markets and keep savings accounts in dollars today.

In the past, investing generally involved *taking risks by moving away* from gold, which was always seen as money. Today is the opposite. For any fund manager, buying gold today means investing, taking risk, because fiat currencies like the dollar, the yen, and the British pound are regarded as the ultimate financial safety. Much like today's notion that gold is an investment, paper currencies printed at will by monetary authorities without any backing by a tangible asset for which the bills can be exchanged is an original concept in the millennia of financial history.

^{*} In the 1850s in the United States, there were more than ten thousand different kinds of paper currency, most of them notes issued by private banks, each exchangeable for a fixed amount of gold or silver. See Stephen Mihm, *A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States* (Cambridge, MA: Harvard University Press, 2007).

Gold is, and always has been, money. Today's troubled monetary system, which no longer has gold as a foundation since 1971, has turned the metal into an investment.*

If you agree with my logic that gold is really new as an investment asset class—effectively trading freely since 1971 and only legal to own as an investment again for American citizens since 1974—then you will find that the precious metal is only in its second bull market. This makes it impossible to make any credible statistical observation about gold's price dynamics since a minimal number of gold market cycles, say seven or eight, would be needed to make a valid observation like "Gold's bull market run is three standard deviations above normal." Besides, lacking a price-to-earnings multiple or other traditional financial valuation multiple makes putting a price on gold particularly difficult.

Stock market observers have the advantage of multiple investment cycles with which to compare the present one to arrive at a judgment regarding the attractiveness of equities at present. More importantly, stocks are linked with earnings, cash flows that can be given a market value. Not so for gold. And considering that the only other bull market for the metal occurred under economic and financial conditions that were significantly different than those we are living through at present—for one, there was no question about the U.S. government's solvency in 1979—the task of trying to determine where the metal will go from here with any precision is extremely difficult. The value of gold over the next few years will not be determined by some Wall Street valuation formula, but rather by the drivers discussed in this book and ultimately the world's sense of what money really is: Hard money will continue to rise if confidence in many financial instruments and fiat paper currencies continues to weaken. Is gold—which has a finite supply—in a bubble, or are trillions of dollars in new fiat money created out of thin air during 2009 part of an even bigger bubble?

A second important thing to consider before moving on to supply and demand is gold's minuscule position in the global financial asset

^{*} If gold were ever regarded as "cash" again—no doubt an unlikely proposition—demand for the scarce metal would likely drive the price into the tens of thousands of dollars per ounce.

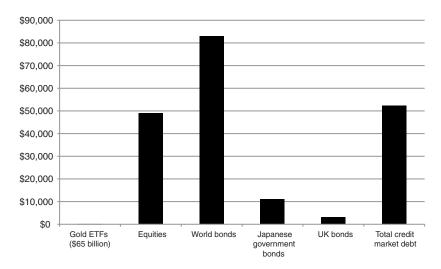


Figure 6.1 Size of Several Major Financial Markets, 2009 (\$ Billions) Sources: Bloomberg, International Financial Services London, Ned Davis, World Federation of Exchanges, World Gold Council.

universe. Figure 6.1 provides a sense of gold's importance in comparison with several other major assets, like stocks and bonds, in the global financial asset pool. Total global investment assets are close to \$200 trillion. Gold Exchange-traded funds (ETFs) have roughly \$65 billion invested in them today, which makes them a barely perceptible portion of the world's investment assets. When combining gold ETFs with all other forms of gold investment, they amount to just over one half of one percent of global financial assets, as shown in Figure 6.2. Gold remains a negligible part of the world's investment universe.

Supply: Even When Gold Skyrockets, Supply Barely Moves

Gold's small position in the global financial asset pool is an important starting point for looking at the precious metal's supply. Figure 6.3 provides a picture not only of the aboveground gold that exists today

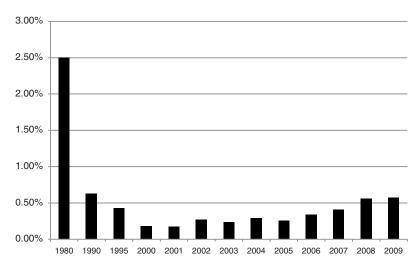


Figure 6.2 Gold as a Percentage of Global Financial Assets SOURCE: CPM Group.

and in what form it is held (pie at the top); it also explains how a fraction of that gold flows around the world's precious metals markets each year. The pie charts on the bottom display the physical gold movements of supply and demand during 2009. The bottom left one shows the division of total supply for the year 2009 into mine production (65 percent of total) and scrap sales (35 percent). But of these two sources, only mining

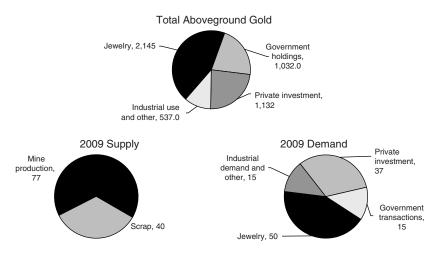


Figure 6.3 The World's Gold (Amounts Are Millions of Ounces) Source: CPM Group.

production (the conversion of underground gold into aboveground refined gold) actually increases the supply of total gold, which typically amounts to 1 to 2 percent each year. The bottom right pie chart shows how annual demand for gold was divided into jewelry (43 percent of total), private investment (32 percent), industrial demand (12 percent) and government transactions (the remaining 13 percent). That governments became net buyers instead of sellers (they used to often represent as much as 20 percent of supply) was a major transformation in the gold world, as discussed below.

The pie chart at the top shows the total gold, 4.8 billion ounces, which is worth \$5.8 trillion with gold trading at \$1,200. This is an estimation of the value of all the gold in the world, and as the pie slices show, 44 percent of the precious metal is in jewelry form, with the remainder in central bank holdings (21 percent), private investment (23 percent), and stockpiles for fabrication of many kinds and other uses (11 percent). The \$6 trillion in gold that exists in the world today gives the impression that there is a large quantity of the metal that could be sold at any moment, which would prevent gold prices from rising higher, a point made often by critics of gold as an investment. But history has shown that the vast majority of gold owned in various forms around the world would not be sold even if the price of gold doubled—or tripled, or rose tenfold.

Take a closer look at the larger pie chart at the top in Figure 6.3. Most of the aboveground gold is held as jewelry and, considering the importance of the wedding ring on my finger as well as the countless personal gold jewelry items owned around the world, it is unlikely that a large portion of it would ever be mailed in to Cash4Gold.com. The same can be said for the thousands of tons of gold that are in the world's museums and churches. In fact, jewelry scrap typically accounts for less than 30 percent of total annual gold supply, which adds up to less than 1 percent of all gold, even in years when the precious metal's price is rising fast. Even during 2009, when scrap sales surged, this gold represented less than 0.9 percent of total aboveground gold. During 2008, when Cash4Gold was actually a Super Bowl advertiser because so many people wanted to exchange their jewelry for cash, gold scrap only amounted to 0.8 percent of total mining supply—surely a year when a great many unemployed people needed cash. Another way of thinking about people's jewelry

sales (the largest source of scrap gold) is that, other than mining production and any central bank sales, only 0.75 percent of the world's existing gold was sold in 2008, one of the worst years in financial history, one during which millions of people lost their jobs. A minuscule amount was also being sold when gold was skyrocketing in the late 1970s. Consider that in 1980, following the nine years after which gold had surged an astonishing 2,300 percent—double the amazing performance of the 1990s NASDAQ stock market boom—scrap sales amounted to less than 0.8 percent of all gold. Perhaps a more bullish consideration regarding scrap—something to think about as you drive by the countless "We Buy Gold" signs sprouting up—is that those who have already sold no longer have the gold in their possession left to dispose of. As it turned out, 2008 and 2009 were the highest years for scrap sales we are likely to see in quite a while, considering historical trends. (See Figure 6.4.) And despite the dumping, the price of gold rose in those years, anyway.

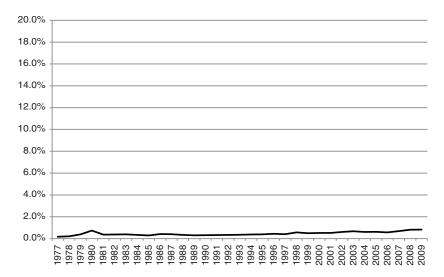


Figure 6.4 Scrap Supply as a Percentage of Aboveground Gold, 1977–2009 SOURCE: CPM Group.

Table 6.1 Twenty Largest Central Bank Gold Holders (Third Quarter 2009)

	Gold (US\$ Millions)	Total Reserves (US\$ Millions)	Gold as a Percentage of Total Reserves
United States	260,387.6	383,642.4	67.9%
Germany	109,093.4	170,421.8	64.0%
International	103,000.4	n.a.	n.a.
Monetary Fund			
Italy	78,494.0	125,916.5	62.3%
France	77,968.2	123,135.4	63.3%
China	33,746.0	2,322,210.0	1.5%
Switzerland	33,298.2	118,833.2	28.0%
Japan	24,497.8	1,055,289.0	2.3%
Netherlands	19,607.3	39,147.5	50.1%
Russia	18,922.2	413,523.8	4.6%
European Central	17,190.0	67,204.1	25.6%
Bank			
Taiwan	13,562.1	345,801.3	3.9%
Portugal	12,245.7	14,632.8	83.7%
India	11,453.1	282,309.1	4.1%
Venezuela	11,411.3	32,845.1	34.7%
United Kingdom	9,932.6	67,455.2	14.7%
Lebanon	9,182.8	35,680.0	25.7%
Spain	9,015.5	26,751.8	33.7%
Austria	8,963.7	17,600.1	50.9%
Belgium	7,283.9	23,592.3	30.9%

Sources: World Gold Council, CPM Group.

Another potential source of dumping, as can be seen in Table 6.1, would be sales by the world's central banks, which hold one-fifth of all gold, approximately 1 billion ounces. Today, the world's largest holders are the United States, Germany, Italy, and France, although China and India have been climbing in the ranks very rapidly in recent years.

But it would be difficult to argue that central bank sales will increase in the years ahead as vault gold has already fallen to the lowest level ever: Central banks have been dumping the precious metal for decades (when prices were lower), driving it down to roughly 10 percent of total reserves, the lowest portion of foreign exchange reserves in financial history. In fact, after decades of disposing of their gold, unloading millions of troy ounces onto the market, central bankers' attitude toward gold

has changed noticeably. And in 2009, the big sellers of gold—like the International Monetary Fund (IMF), which sold more than 200 tonnes of gold—were met by even bigger buyers, like China and India.

Despite the tremendous size of the IMF transaction, in 2009 central banks were actually net buyers of gold for the first time in years. In less than a decade, Asian nations have replaced Western ones as the dominant players in the reserve asset space. China, Japan, and India account for most of total world reserves, but each holds an extremely small portion of its reserves in gold-most notably China, the largest reserve holder of all, with \$2.4 trillion at its disposal. It only holds just a few percent of reserves in gold, as shown in Table 6.1. If it wanted to move to the (historically low) international average today of 10 percent, this would imply it would need to buy several times the world's annual mining supply. Both China and India announced very large gold purchases in 2009 and they are likely to continue moving funds into gold to rebalance their reserves, which remain heavily tilted toward dollar-based instruments. This is one of the key drivers, as discussed earlier in Chapter 4. The gold held for industrial use, 11 percent of total aboveground gold, is inventory stocks to be used in the production of anything from cell phones to computers to dental implants. Since gold is a needed input in the production of multiple products, we are unlikely to see producers selling gold.

Considering that jewelry scrap, central bank holdings, and industrial users of gold are unlikely to add any significant tonnage to supply in the years ahead, what about the mining industry? The world's mines contribute approximately 2,500 tons of new aboveground gold to world supply, which in 2008 represented around 1.5 percent of total global gold. But despite the tripling of prices during the past decade—no doubt a strong incentive to bring more of the precious metal out of the ground—total gold production has been declining, unable to regain the peak of over 2,600 tons reached in 2001. Although output has increased in China (the world's largest producer today) and other parts of the world, this has not been able to compensate for the fact that some of the world's oldest mines have been in decline for some time and no new large deposits have been discovered. Production in South Africa, once the world's largest producer, peaked way back in 1970 and has been falling ever since; Australian production did so in 1997, and in the

United States the peak was reached in 1998. Meanwhile, as energy and labor prices have continued to rise—and many mining operations have been forced to drill deeper and in worsening conditions—the cost of producing each additional refined ounce of gold has surged to nearly \$500 an ounce, about double the level of 2000. Considering that there are only roughly 50,000 tonnes left underground that can be extracted economically, it is reasonable to expect that mining production could decline even more sharply in the years ahead unless new deposits are discovered.

Since all other potential sources of supply are likely to be constrained in the years ahead even if prices rise sharply, as previously discussed, the only remaining source of gold supply would be the world's investors who have been accumulating it. I consider this in the section that follows.

Demand: The Gold Market Is So Small That Little Is Needed to Make It Surge

Because the gold market is so small, a very small segment of people are capable of driving up gold prices.

—Alan Greenspan in an interview with Sherry Cooper, Chief Economist of BMO Capital Markets, October 6, 2006

Although governments and central banks were once a key source of demand for gold, as they sought to increase national wealth and back their currencies with hard money, demand for gold over the past 10 years has come primarily from three sources: the jewelry industry (roughly 70 percent), private investment (20 percent), and industrial demand and other (10 percent). During 2008 and 2009, years of economic turbulence, these percentages changed notably, with investment demand rising to account for 37 percent of total while jewelry demand declined with the global economy's dramatic deceleration. However, even in bad times jewelry has always accounted for the majority of demand. An interesting aspect of gold dynamics over the past decade is that, during periods of economic expansion, jewelry purchases rose sharply and became a key driver of demand along with investment, especially in countries like India, where the precious metal has a dual purpose: physical beauty and

a store of value. Yet during the recent period of economic weakness, investment demand for gold has more than made up for weaker jewelry purchases, and the net result is that gold prices rose in good times and bad over the past decade.

Approximately 23 percent of the total aboveground gold is held in private investment, an amount worth approximately \$1.4 trillion. This is the actual physical gold, notwithstanding the gold net long positions held throughout the world via the futures market or the multiple forms of derivatives contracts that can be entered into in the global financial system. These constitute what is often regarded as paper gold because the contracts are not actual gold, but rather financial obligations and rights to buy and sell under set conditions. As pointed out earlier, gold investment holdings represent less than 1 percent of the world's financial investments. But of the \$1.4 trillion, a substantial part of it is held as permanent wealth in Swiss, British, and Asian vaults, a core position that has already been there for decades, and in many cases for centuries. A great number of individuals, families, and institutions—like Pictet, the largest private bank in Switzerland—regard always holding some percentage of gold as a prudent way to manage one's wealth, a view held for generations. As such, even if confidence in stocks and fixed income instruments surged—as occurred during the 1980s and 1990s—and financial opinion moved against gold, it is unlikely that the precious metal would ever be dumped as massively as Internet stocks were at the turn of the century. Physical gold is a core holding today for many individuals, and increasingly for institutions.

What is perhaps more vulnerable to selling is the growing gold deposits held by exchange-traded funds (ETFs), like the SPDR Gold Trust, by far the largest with \$50 billion in gold on deposit. The launching of ETFs, which finally made gold a viable investment for the great many individuals and institutions unwilling or unable to own physical gold, was the "single most important development in the gold market" since Nixon closed the gold window in 1971, as John Hathaway, a portfolio manager at Tocqueville Asset Management, put it. Prior to gold ETFs, which began trading in 2003, it was impractical and expensive to invest in gold in large quantities. Today, it is simple to buy and sell representative amounts of gold with the click of a mouse. But considering

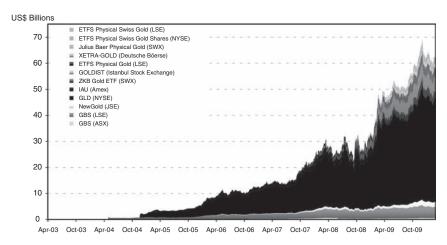


Figure 6.5 Exchange-Traded Gold Holdings, 2003–2009 SOURCE: World Gold Council.

the very short period of time that they have been in existence—and the ability of high-frequency equity traders to operate in the gold space for the first time—we might regard the \$65 billion invested with gold ETFs around the world as potentially the most volatile portion of global investment in the metal.

As Figure 6.5 shows, gold ETF investment has been booming, but there are two key reasons why investment is unlikely to fall significantly anytime soon. First, consider that ETFs gave the world's asset managers access to a major asset class that for practical purposes was largely inaccessible and illiquid as an investment. Gold was literally *uninvestable* for hundreds of investment funds around the world since they could not own the physical metal. (Your mutual fund manager could not buy gold bars or coins with your money and deposit them in a safe somewhere.) Unlike the many stocks—from small start-up companies to, more recently, the biggest banks in the world—that have failed over the centuries, gold is not going away. Second—and far more important—consider the size of gold ETF investment in the context of other assets. Gold ETFs represent less than 0.15 percent of global assets under management and their combined holdings are smaller than numerous individual stocks: The investment is negligible in the broad global asset market. (See

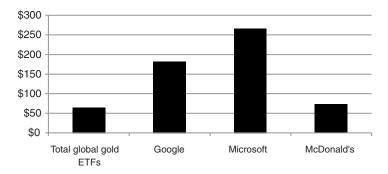


Figure 6.6 Market Value Comparison (Value in \$ Billions)

Source: Bloomberg.

Figure 6.6.) This point is made clear by comparing the total amount invested around the world in gold ETFs with a few select stocks, each of which are larger. (See Figure 6.6.)

\$10K Gold

The small, *fixed* size of the gold market is what separates it from all other traditional financial asset classes: stocks, bonds, real estate, private equity. It is the key to understanding why the metal's price could rise to \$10,000 an ounce. Unlike stocks and bonds, the supply of gold does not react strongly to changes in the price of or demand for gold. When everyone and their grandmothers wanted to own equities during the late 1990s stock market boom, a surge of new stock offerings hit the market, and many of them went up in flames shortly after. People wanted stocks—preferably tech stocks—and quality was not a major concern, so supply rose to meet demand until it was saturated. The same was true in real estate more recently: Home building went on steroids to meet intense demand in the home-buying frenzy, which left us with millions of excess homes when the bust arrived. We continue to suffer from excess housing inventory on the market.

But this would be impossible with gold. There can be no IPOs, no secondary stock offerings, no new buildings erected, since there is a fixed amount of gold in the world. Supply from mines in a *good year* increases total aboveground gold by 2 percent, regardless of what demand is doing.

And as mentioned earlier, constraints on supply are significant. There are strong impediments to production in the mining industry, and scrap sales have already been fairly strong. (Sellers can't go out and make the gold they've already sold.) More importantly, central banks, which used to account for as much as 20 percent of total supply—a fifth of all gold sold—have suddenly become actual buyers of gold. Thus, a fifth of the supply is gone.

Present supply and demand dynamics are in stark contrast with that of the 1980s and 1990s, when gold prices declined: On the supply side, mining production was rising globally and central banks were dumping massively, replacing their precious metals holdings primarily with dollars. Gold was coming off the mother of all commodity rallies, the dollar was strong, Communism had ended, and stocks and bonds were cheaper than they had been in many years. On the demand side, gold was competing against stocks and bonds in the biggest boom ever seen for those markets. The world simply did not care about gold in a year like 1996. In 1999, an American budget surplus was in sight.

But today's situation is dramatically different. In 2010, with all the drivers that I believe point to stronger inflows into gold, consider this conservative possibility: Just 1 percent of the world's holdings in stocks and 1 percent of the world's ownership of sovereign bonds are sold and put into gold. (See Table 6.2.) This would amount to over a trillion dollars, an inflow into the gold market that would be like "shoving an elephant into a mailbox," as an industry specialist put it not long ago in a conversation. That \$1 trillion would be more than 20 times all the gold supplied to the market in 2009. (See Table 6.2.) But considering that more than half of that gold is taken by the jewelry market and by industrial users, the actual supply available to investors was substantially lower. So the multiple is actually higher: One percent of the stock and bond markets is equivalent in value to more than 30 times the size of the investment gold market. It would be quite difficult to determine with precision how high gold could rise, considering the inflexibility of supply, but \$5,000 would be an easy target and \$10,000 would seem reasonable. I would also think that a small part of the allocation would be destined to the silver, platinum, and palladium markets, which are substantially smaller. In dollars, gold mining supply is multiple times larger than that of silver.

 Table 6.2 Effects of a 1 Percent Shift into Gold

Size of Global Markets (\$ Billion)	Size				One Percent Shift into Gold	Percent of Gold ETF Market	Percent of Annual Gold Mining Production
Equities	\$46,500.0	×	1.0%	II	\$465.0	715.4%	775.0%
World Bonds ^a	\$83,000.0	×	1.0%	II	\$830.0	1276.9%	1383.3%
Gold ETFs	\$65.0						
SOURCE: WGC, World Federation of Exchanges, Internat International Financial Services London, end 2008 data.	ld Federation of Exchanges, International Financial Services London. ial Services London, end 2008 data.	s, Internati 2008 data.	ional Financia	d Services	London.		

Is the Price of Gold Being Manipulated?

When considering the possibility of a gold spike, there is one other issue that is worthy of note. A movement in the precious metals investment world led by the Gold Anti-Trust Action Committee (GATA) is trying to expose what it sees as a concerted effort by financial authorities to suppress gold and silver prices. The organization believes precious metals prices would be substantially higher absent this alleged intervention in the market, done mainly via the commodities futures markets and central bank gold lending.

Although many gold observers have wondered why the precious metal didn't spike during instances of severe financial distress (see Figure 6.7)—like the day in 1987 when stocks plunged more than 20 percent (see Figure 6.8) or during the 9/11 disaster—most conspiracy theories fail in the absence of a convincing motive, and in this case one should ask why the government would have any interest in suppressing the price of gold and/or silver, which have so little influence on the financial system today? Although ancient gold seems to have lost its relevance in our modern financial world run on flashing computer

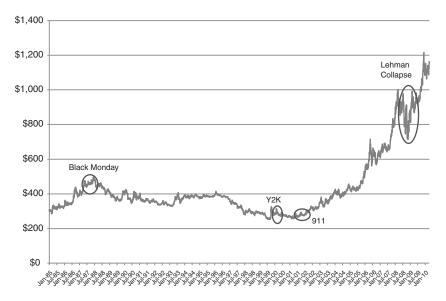


Figure 6.7 Gold Price since 1985

Source: Bloomberg.

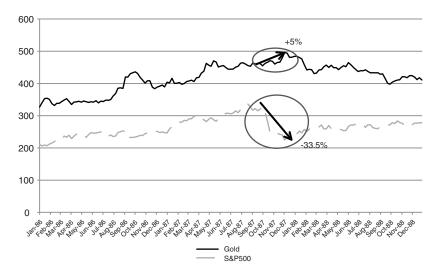


Figure 6.8 Stock Market Crash, 1987 Source: Bloomberg.

screens, I think there is a significant motive that makes GATA's conspiracy theory something to think about.*

The Treasury Department and the Federal Reserve certainly have an interest in seeing that the price of gold, the only major financial asset with no counterparty risk, does not increase substantially. Think about this scenario: If gold began to rise sharply in a crisis of financial trust and people found reason to begin dumping traditional investment assets—stocks, bonds, even cash—and buying precious metals, this could lead to even deeper trouble than a significant drop in financial markets would imply. (Remember, as discussed in this chapter, that the gold investment market is very small relative to others and that a relatively minor rise in investment would likely cause a surge in prices.)

If the broad investing public saw rising gold as a compelling investment, in an extreme situation money could eventually be pulled out of anything from the financing of hot dog carts to major infrastruc-

^{*} In my conversations about GATA I've found that professionals in the gold mining and financial industries have not taken the organization seriously over the years due to its penchant for hyperbolic descriptions of alleged manipulation of the precious metals market.

ture maintenance and construction—and, most notably, government bonds—leading to a spike in interest rates, and ultimately deflation and another banking system crisis.

There is a precedent for this. In 1933, amidst a wave of bank failures during the worst deflationary crisis in U.S. history, the government was ultimately forced to confiscate gold to prevent individuals and institutions from continuing to dump paper money and other financial assets in one of the deepest crises of financial trust ever. Remember "We have nothing to fear but fear itself!"? The words were uttered by President Franklin D. Roosevelt precisely at this time: Americans were running to gold. Our leaders evidently want to prevent something like this from ever happening again, and they—particularly Federal Reserve Chairman Ben Bernanke, a Great Depression expert—know that a rise in gold is something to be watched closely.

Gold offers ultimate financial insurance for individual investors and institutions, but since a gold investment wave can suck resources out of the broader economy-most notably in that it can pull money out of bonds, the lending of money that requires some degree of trust in the issuer (like the U.S. Treasury)—it carries systemic risk that authorities may be forced to consider again in the future. Hence there is, and always has been, a motive for financial authorities to want to prevent a dramatic rise in the number of people wanting to convert their paper money into hard money, a situation that governments have faced many times over hundreds of years: People put their money in what they believe in, and precious metals investment surges reflect a severe distrust of government and the financial system it supervises. I think there is a reason—one that goes beyond the ubiquitous sense that "gold only makes sense if you think the world is ending," and other such naïve comments seen in the financial press—why financial authorities almost never mention gold in public discourse. (It would certainly be relevant for, say, the U.S. Treasury secretary to discuss the precious metal considering that the country is the largest owner of gold in the world, by far. It is the largest reserve asset on the U.S. government's balance sheet, or so we're told, GATA would argue: the U.S. government has not allowed an independent audit of the nation's gold in decades.)

Gold competes with other financial assets based on perceptions of risk and potential return, and investors choose what they regard as the most promising ones. In recent years attention has partially moved away from trying to increase returns on investment to protection of principal, an environment in which gold investment tends to rise. The federal government and Federal Reserve would not like gold to be perceived as the most attractive asset, as this could interfere with their authority over financial markets and the economy, which is exercised via government spending and taxation, as well as control over interest rates and the monetary base. The purchase of physical gold—the buying of rocks—moves investors and savers away from government and the financial system itself. This financial decision interferes with and impedes the government's control over the financial destiny of the individual who is rejecting government-issued cash.

Although gold investment has been rising, the increasing flows have been a trickle, relatively speaking, up to now—far more U.S. investment dollars have moved into money market funds since the 2008 financial markets crisis. And, though I read GATA's reports, I have yet to see convincing evidence that the Federal Reserve or Treasury Department have actually participated in the active suppression of gold prices, merely suggestions that this may be occurring.

Perhaps most importantly, the people I know who actually deal with central banks and the buying and selling of gold—not by the ounce, but by the tonne—see no evidence of government efforts to control gold prices. But maybe the potential for government authorities to try to control the gold market will become a factor to consider at some time in the future. It would not be the first time this has happened. Considering the long history of currency crises and gold, one leading global investors to run toward the other, financial authorities certainly could have reason to do so in time. This, what I call government risk, is why reading this book's section on physical gold—and Chapter 15 on rare coins, in particular—is important.

Investment Considerations for Gold

Pros

- 1. High portfolio diversification benefits.
- **2.** Increasingly being seen as a currency.

- **3.** Mining supply peaked in 2001.
- **4.** Central banks have sharply reduced gold sales.
- 5. High Asian demand.
- 6. Minuscule large fund ownership.
- 7. Takes many years to ramp up mining supply.

Cons

- 1. Provides no cash flows.
- 2. There is no reliable valuation metric.
- 3. Central banks can dump gold.

Note

1. Strictly speaking, only central banks were able to exchange dollars for gold.

Chapter 7

Silver: Poor Man's Gold May Offer the Richest Returns

s precious metals, hard money, continue to recover their position as core assets in the investment world, I believe silver has a greater potential for appreciation than gold. It is common in many ways, a fact reflected in that its cost per ounce is a small fraction of the price of gold, and yet it is more scarce than is often acknowledged. It is easy to invest in silver via coins, bars, exchange-traded funds (ETFs), stocks, and futures, and yet a very, very small number of investors have yet to make it a part of their portfolios. Investment demand for silver is a small fraction of that for gold, and yet no central bank has any notable reserves that could be dumped on the market to suppress its price, which is the case with gold. If investment demand for silver continues to rise from a leisurely walk, to a trot (gold is already running), I think we are on

the verge of a fundamental revaluation of what is known as *poor man's gold* that would push silver's price perhaps well above \$100 per ounce—that is, multiple times its present level. But I write these lines with a clear understanding of how many silver bulls have been so terribly wrong in predicting its climb and betting on it.

Most notable were the Hunt brothers in the short period leading up to 1980. In an effort to corner the silver market, they—and the great many speculators who went along for the ride—caused the price of silver to spike above \$50 an ounce very briefly before it plummeted to well below \$10 within a few months. And the price of silver would eventually fall more than 80 percent from that peak. The Hunts lost much of their fabulous fortune as a result. And despite the recent bull market, as of this writing silver is still well below that peak reached 30 years ago. In 1993 Jim Blanchard, one of the country's leading experts on precious metals, wrote *Silver Bonanza*, a well-researched book that predicted a surge in silver. But the bull market would have to wait until the end of the Internet bubble and for the dollar to begin declining sharply before silver could even average above \$6 an ounce, which didn't occur until 2004. Investing in gold was a painful experience during the 1980s and 1990s. Silver was even more disappointing, as you can see in Figure 7.1.

In its most basic form, the argument for why gold should surge in value is that a growing number of investors—and savers—will decide to acquire the precious metal and that its limited supply will drive the price higher. Leaving aside concern about the dollar, inflation, negative real interest rates, or the stability of the global financial system, the argument for gold is simply that investment funds, central banks, and individuals will decide to secure a larger portion of their wealth in the precious metal, which has a finite supply. There can be no initial public offerings, or new gold bars or coins coming out of nowhere, as can be the case with stocks or bonds, whose supply tends to rise when demand is strong. But gold cannot be replicated. And as demand has risen far more rapidly than supply in recent years, only a rise in prices has been able to maintain the balance between weak supply and climbing demand. But while a great number of investors—like John Paulson, whose investment fund is one of the biggest gold owners in the world today—understand this supply/demand dynamic for gold, few have taken a close look at the supply/demand dynamic for silver, which in many ways is more compelling.

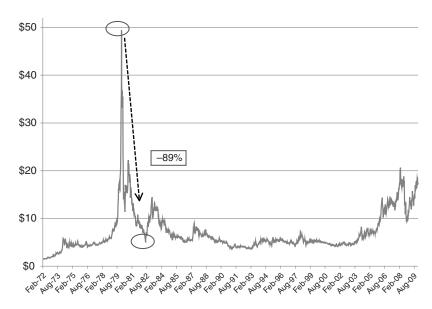


Figure 7.1 Silver Price, 1972–2009

Source: Bloomberg

Before considering the present supply and demand equation for silver, it would be worthwhile to briefly consider the metal's lengthy financial history, since this is relevant to its future. Silver served as a formal store of monetary value until very recent years. In fact, silver was the premier monetary metal for most of the history of human civilization, which makes the present disdain for silver as a store of value a historical anomaly. Being more common as an investment than gold—a metal mainly restricted to the affluent and governments and often for large transactions—silver was a portable store of value used far more extensively for thousands of years in international commerce. Silver was the first equivalent—gold's time would come later—of what the U.S. dollar represents today, a globally accepted means of exchange and store of value everywhere. Minted into coins in countries across the world, in the early years of the budding American republic it was common to see silver money from France, Great Britain, and other countries being exchanged for goods. Provided a Spanish silver dollar had the same weight as an American one, it was legal tender for business in the newly established United States.

But silver's position in the global monetary system began to change dramatically early in the nineteenth century. Silver had been circulating alongside gold in much of the world in a bimetallic system with a fixed exchange rate, which, in the case of United States, meant that 15 ounces of silver was legally exchangeable for an ounce of gold at the U.S. Mint. But since silver and gold supplies grew at different rates—subject to mining vagaries, such as massive gold discoveries in California and Russia in the 1840s—at any given time silver could be far more or less rare than gold. This made it possible for speculators across the world to buy silver where it was plentiful and cheap and turn around and sell it where it was scarce. Tons of silver were being dumped at world mints, which were forced to pay sellers in gold. Speculation became so intense that in time most countries opted for either silver or gold, abandoning the bimetallic monetary system that had become so disruptive, to evade the problem completely. Great Britain, the dominant global economy at the time, led the way in 1816, opting for gold. By the Paris Conference of 1878, which dealt with the issue, most European countries had abandoned bimetallism to the benefit of gold, and the United States would do so in time, as well.² The world was on the gold standard and would remain so, in one form or another and with notable interruptions, until 1971.

Absent the monetary demand that had kept silver prices strong, the precious metal declined continuously in value relative to gold from the mid-1850s well into the 1920s. By the 1930s, when the Great Depression had taken hold of the global economy, China was the only major country that remained on a silver standard.³ When silver fell to the lowest price ever recorded in the United States, 24.5 cents per ounce on December 29, 1932, nobody could know that the price would triple over the following three years. (Yet another reminder that bad times are often times of great opportunity.) Following President Franklin D. Roosevelt's intervention in the gold market in 1933, when he devalued the dollar against gold in an effort to create inflation in the depressed U.S. economy, the new administration also launched a silver program that would have a deep effect on the global market for years to come.

Ostensibly, the Silver Purchase Act of 1934 was ordered in keeping with the new president's pledge for a "sound currency to be preserved at all costs." But of course, the United States had been on the gold

standard for decades by then and it was more likely that Roosevelt was simply giving in to the American silver mining industry's well-publicized demands for assistance. Regardless of Roosevelt's motivations, the silver legislation had deep implications, since it authorized the Treasury secretary to "buy and sell silver at home and abroad, and at any price he deemed to be in the public interest."⁵

Domestically, the silver legislation gave, as the late Milton Friedman pointed out, a major taxpayer-subsidized profit to the silver industry. But the international effects would eventually hurt the U.S. mining industry, since the consequent surge in global silver prices caused the remaining countries on a silver monetary standard, like China, to abandon it completely. As prices began rising rapidly passing 50 cents an ounce in 1934, the silver in Chinese coins soon became more worthy than the stated value on coin faces. It became profitable to melt down and export Chinese metal currency to the other side of the world. As a result of Roosevelt's silver policy, which was intended to help the domestic mining industry, silver from the rest of the world began rushing to the United States, where it was amassed in U.S. Treasury vaults to gather dust for decades. The monetary demand for silver, which consumed more than 40 percent of supply in 1933, collapsed with higher prices. By 1979, only 5 percent of total silver consumption was used in coins and today the amount is virtually zero.

In the space of just a few years during the 1930s, the U.S. Treasury accumulated a stunning two billion ounces of silver, a fact that for decades would give pause to anyone wanting to speculate that silver was a commodity worth betting on: Any shortage of silver in the market, pressuring prices upward, could quickly be remedied by the U.S. government, which could and would sell silver.

Silver prices remained depressed until the 1960s, when inflationary concerns began rising as a result of massive military spending by the U.S. government linked to the expanding war in Vietnam. Climbing deficits—minuscule by today's standards—began raising concerns about the American commitment to keep the Bretton Woods global monetary system functioning by maintaining the dollar linked to gold. (As I discuss shortly, silver tends to rise or fall with gold.) As a result of rising silver prices at the time, the silver content of quarters and dimes was almost completely removed since producing silver-based coins suddenly

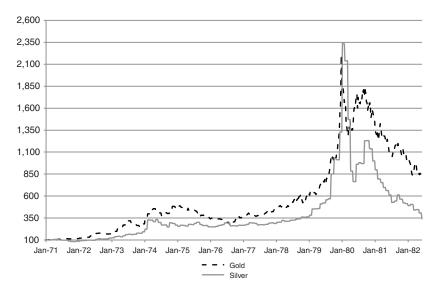


Figure 7.2 Price Chart of Silver and Gold, 1971–1982 (Indexed to Start at 100) Source: Bloomberg.

cost more than each quarter or dime's face value.* But the U.S. government's silver stockpile, which still amounted to 375 million ounces in 1970, along with booming global mining production, prevented silver from rising as sharply as gold during the 1970s. Although silver rose to \$50 an ounce in 1980, its performance was not able to keep up with gold, as shown in Figure 7.2, and its price remained subdued well into the 1990s.

But in recent years, silver has followed gold's steep climb, even though the supply and demand dynamics of each metal are significantly different. For one, silver is more plentiful than gold, with 888 million ounces in

^{*}If quarters today continued to be made mostly of silver, as they had been minted for decades, it would cost several dollars to make each one. The Morgan and Peace silver dollars that used to circulate across the nation and jingle in countless pockets early in the last twentieth century would cost at least \$18 each to produce today. Although a fraction of these coins survive and are investments for many Americans today (as discussed in Chapter 15), most of them, minted during the late 1800s on through 1935, have been melted down over the years to extract their silver content.

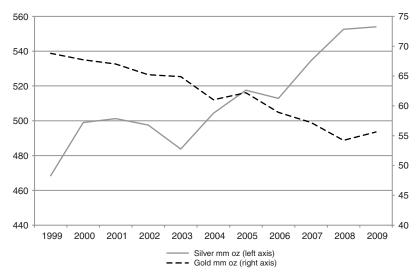


Figure 7.3 Silver and Gold Mining Supply, 1999–2009

Source: CPM Group.

total new supply hitting the market during 2009, which is seven times the amount of gold. Furthermore, silver mining production has been climbing uninterruptedly over the past decade, while gold extracted from the world's mines has remained below its 2001 peak, as you can see in Figure 7.3. While gold production comes primarily from mines built specifically for the extraction of that precious metal, much of silver supply comes as a by-product in the mining of other metals, like copper. In fact, BHP Billington, the largest silver producer in the world, does not even derive most of its revenue from the precious metal, but rather from copper, iron ore and petroleum products. This makes silver mining production far more sensitive to changes in the economy: If the demand for copper fell sharply and prices plunged, as occurred in 2008, the silver derived indirectly from copper mining would decline as well, and there would be less on the market even if silver prices were climbing. This supply fact is an important consideration if precious metals continue climbing due to strong financial demand even if the economy begins to weaken again: Since much of the silver mined comes from the extraction of other metals, there would be less supply in an economic contraction, which could make its price climb even more sharply.

While the supply factors just mentioned are as true today as they were 20 or 30 years ago, one thing changed significantly in 2004: The United States government sold the final ounces it held in the once two-billion-ounce stockpile it had accumulated during the Great Depression. Before that year, whenever the U.S. Mint needed silver to mint U.S. silver eagles, it got the metal from the U.S. Treasury. But now it must go out into the market to acquire silver, a fact that might have influenced its supply of newly minted coins in 2009, since it was forced to suspend shipments on at least two occasions due to surging demand. The governments of other countries, in addition to the United States, have also had less to sell in the market to meet surging demand, as can be seen in Figure 7.4.

Consequently, governments have virtually no ability to affect the price of silver, a situation that is in stark contrast with that of gold. As discussed earlier in the book, governments have taken an active role in containing gold prices by dumping millions of ounces of gold on the market over the past few decades. Although central bank holdings have plunged, they still hold substantial gold that could be sold if they wanted

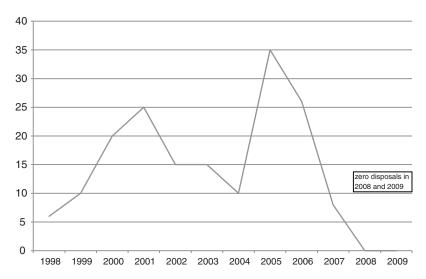


Figure 7.4 Net Government Sales of Silver, 1998–2009 (in Million Ounces) Source: CPM Group.

to resume their policy of replacing hard assets with paper currency. (However, as mentioned in Chapter 6, concerned that dollar holdings have grown too large, central banks in 2009 became net buyers of gold for the first time in many years.) But governments can have no such influence on the silver market because collectively they own virtually none. Although the exact amount fluctuates, there are roughly 500 million ounces of silver bullion available for sale in any given year, perhaps one-fourth the amount of gold bullion that is available for sale on financial markets. When converted into dollar value, this means that there is roughly 250 times more gold that could be sold on the market than silver. Hence, although more silver is mined than gold each year, there is far more gold than silver aboveground. So, in this sense, silver is rarer than gold.

Yet gold costs 65 times more than silver per ounce, a simple reflection of demand: Gold is a more desirable metal and is perceived to be of greater financial and aesthetic value. Investment demand for gold dwarfs that of silver, with more than \$70 billion in gold purchased for investment in 2009 compared with \$3 billion in silver. The same is seen when comparing demand for gold and silver via exchange-traded funds (ETFs), where gold demand (in dollars) is substantially higher, as can be seen in Figures 7.5 and 7.6.

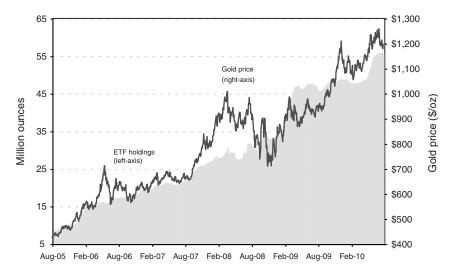


Figure 7.5 Gold ETF Holdings SOURCE: BMO Capital Markets.

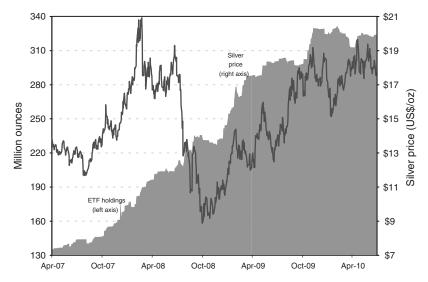


Figure 7.6 Silver ETF Holdings SOURCE: BMO Capital Markets.

It is demand alone that makes gold more valuable than silver, since one could argue that silver is becoming rarer more rapidly than gold. In addition to the fact that there is far less aboveground silver than gold, millions of ounces of silver are destroyed in industrial production each year. The quantities are stunning: Roughly two billion ounces were used up—permanently—by industry in the past 20 years alone. Despite recycling efforts, a small amount is recovered each year: Over 800 million ounces of silver are used in fabrication processes and only 180 million ounces come back as scrap. In contrast, the vast majority of gold used in various ways is recycled, and hence most of what has been mined and refined in human history is with us today. Yet despite the growing scarcity of silver, stronger demand for gold than silver has made the gold/silver ratio (simply the value of gold relative to silver) surge in recent years. Gold has risen to new records above \$1,000 per ounce and silver, also a precious metal, has not been able to keep up. The present gold/silver ratio is at 65 (gold is valued at 65 times the price of silver), but it was not until recent decades that it has been at such a level. For three millennia of human history the ratio ranged between 9 and 16 (see Figure 7.7). If we were to return to the historic ratio, this would imply silver would climb to around \$70, more than triple its price as of this writing.

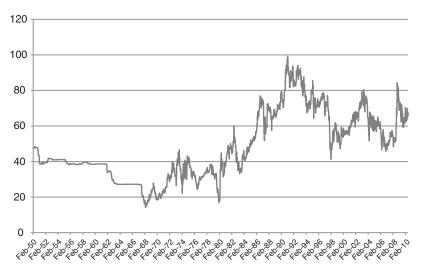


Figure 7.7 Gold to Silver Ratio, 1950–2010

Source: Bloomberg.

What would make that happen? First, silver is highly correlated with gold: They both tend to move in the same direction, up or down. As a result, silver has climbed along with gold during the surge in the 2000s, and in fact it performed better than gold in 2009, climbing 48 percent versus 24 percent for gold. If gold's climb continues, it is most likely that silver will do so as well. Hence, silver would benefit from all the drivers of gold discussed in this book—the concerns about global fiscal mismanagement, the need for true financial insurance, the declining value of paper money, the cultural change in wealth management and preservation. Second, investment demand for silver is a tiny fraction of investment demand for gold, as shown earlier. If large investment flows continue to move into silver, the relatively small supply base will come under pressure and industrial buyers may be forced to begin accumulating inventories, which would push the price up even higher. Keep in mind that, since the silver market is much, much smaller than that of gold and the investor universe is minuscule, a relatively small increase in silver investment makes it rise more rapidly than gold. Its rise in 2009 was a clear example.

Silver is also a metal that is accessible to a far larger investor base than gold since it is substantially less costly per ounce. At the family-run McBride's coin shop in Austin, Texas, there are generally more silver than gold buyers and the reason is clear: There are few people able and willing to spend over \$1,000 dollars on a single coin, which is what buying an ounce of gold requires today. Gold investors have historically been the world's wealthier citizens. Should the precious metals bull market continue attracting more investors, more and more of them—from the taxi driver to the waitress—are likely to realize that they can benefit from the boom via silver, as well as gold.

Investment Considerations for Silver

Pros

- 1. Correlated with gold.
- 2. Much smaller aboveground supply than gold.
- 3. Long history (forgotten) as major monetary asset.
- 4. Central banks own virtually none.
- 5. High Asian demand.
- 6. Minuscule large fund ownership.
- 7. Takes many years to ramp up mining supply.

Cons

- 1. Provides no cash flows.
- 2. There is no reliable valuation metric.
- 3. Can perform poorly in recession (industrial demand significant).
- **4.** More volatile than gold.

Notes

- 1. James Blanchard, Silver Bonanza: How to Profit from the Coming Bull Market in Silver (New York: Simon & Schuster, 1993).
- 2. Dickson Leavens, Silver Money (Bloomington, IN: Principia Press, 1939), 47.
- 3. Milton Friedman, "FDR, Silver and China" in *Monetary Mischief: Episodes in Monetary History* (Orlando, FL: Harcourt Brace Jovanovich, 1992), 171. Other countries included Ethiopia and Persia (now Iran).
- 4. Ibid., 161.
- 5. James Paris, *Monetary Policies of the United States*, 1932–1938 (New York: Columbia University Press, 1938), 61.

Chapter 8

Platinum and Palladium: Metals as Old as the World, but as New as the Internet, as Investments

nlike gold and silver, which—with the brief exception of the past four decades—were regarded as money around the globe for thousands of years, platinum and palladium are as new as the iPhone in the investment and monetary world. Since the technology needed to smelt the metals had yet to be developed, Benjamin Franklin surely did not pull out a platinum coin to pay for his famous kite nor get change in palladium during the eighteenth century. Besides, for millennia

the metals were regarded simply as undesirable impurities in the refining process of other metals. For practical purposes platinum and palladium, which are as old as the world, went public just three years ago. In 2007, two financial firms launched exchange-traded funds (ETFs) for each metal and as a result it finally became practical for mainstream funds to invest in them and for individuals to buy shares for their 401(k)s. Before then, any person wanting to own one of the two P's had to buy coins issued by the Bank of Canada or the few other central banks that mint them, or invest in the metals via the futures market, an investment arena mainly used by professional traders or industrial hedgers.

Platinum and palladium are two of the six platinum group metals, commonly referred to as PGMs. There are no practical vehicles for investing in the other four—osmium, iridium, ruthenium, and rhodium—for the time being and their markets are far smaller, so they are not explored in this book. The six metals share important chemical and physical properties that make them useful in industrial applications, and the beauty of at least two of the metals makes them popular in jewelry. Platinum and palladium have catalytic properties, which means they accelerate certain chemical reactions, are good electrical conductors, and perform well in high-temperature applications. Most significantly, these two PGMs are vital inputs in antipollutant catalytic converters in the world's automobiles, which can convert up to 90 percent of the gases produced by cars into less harmful emissions. But they are also used in dentistry, medicine, computers and other electronics, groundwater treatment, and a great many chemical applications.

The investment potential of platinum and palladium is being driven, as with gold and silver, by dramatic changes in the supply and demand dynamics for the metals. Naïve as it sounds to even state the obvious, it is important to keep this in mind: Platinum and palladium prices will only rise if demand is greater than supply. When you think about industrial demand for platinum and palladium, think cars—both metals are primarily used in autocatalyst applications in the automobile industry, which accounts for around half of total demand for the two metals. However, an ounce of platinum costs around three times as much as a palladium ounce. This difference is partially explained by the fact that twice the amount of palladium is needed to substitute for platinum in the production of auto catalysts. Also, only platinum is used at present in the

fabrication of diesel catalytic converters. This might suggest that platinum would only cost roughly twice the price of palladium, but there is also a larger supply of palladium on the market at present, which has kept the metal's price from rising as strongly as that of platinum. Another 20 percent of demand comes from the jewelry industry—where platinum is in greater demand—and most of the rest is used in a variety of chemical, electronic, petroleum, and other industrial applications. The minuscule remainder of demand, around 5 percent, is from financial investors in the metals.

The combined value of all platinum and palladium supplied to the market each year by the mining industry (84 percent), along with the remaining autocatalyst and jewelry scrap is \$10.5 billion, as shown in Figures 8.1 to 8.4. It's a tiny fraction of the silver and gold that are produced each year. To put the amount into investment perspective, the money traded in shares of Google in a week could buy the world's entire annual production of platinum and palladium.

Such a tiny market has tremendous risks and volatility. Since the prices of platinum and palladium are influenced by such factors as demand for automobiles and supply from South African mines—which produce half the world's platinum and more than a third of all palladium—a

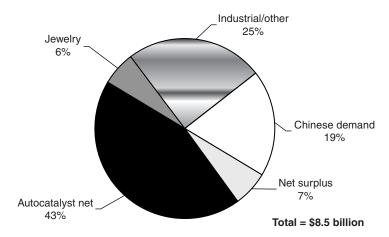


Figure 8.1 Platinum Demand

SOURCE: CPM Group.

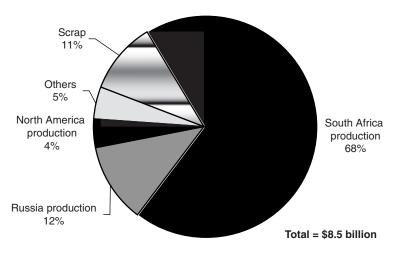


Figure 8.2 Platinum Supply

Source: CPM Group.

decline in car purchases or an energy crisis in South Africa can have a deep effect on the market. In fact, this is exactly what happened during 2008: The world experienced one of the worst years in the auto industry's history, with global output plunging by almost a third, and South African mining production was repeatedly interrupted by power outages. Consequently, the small number of investors in the metals,

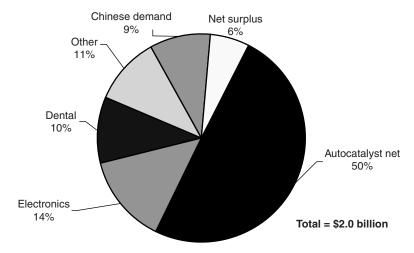


Figure 8.3 Palladium Demand

Source: CPM Group.

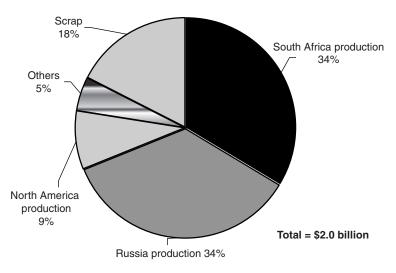


Figure 8.4 Palladium Supply

SOURCE: CPM Group.

which at this point make up less than 10 percent of demand, were rocked in an amazingly volatile year: Platinum prices swung between a high of \$2,273 an ounce and \$763. In one of the worst years in stock market history, platinum was significantly more volatile than equities during 2008. Figures 8.5 to 8.7 point to these metals' volatility. This is not a market for investors with weak stomachs.

Glancing at these charts, one immediately notices that the price of platinum has surged and that palladium has not been able to keep up. Intuitively, considering the fact that most of the demand for both metals comes from the auto industry (as shown in Figures 8.1 and 8.3), one would have thought that their prices would have moved in lockstep, or at least in a similar direction over the past 10 years. Perhaps that will happen in the future, but the supply/demand balance for palladium was deeply affected by a supply disruption in the late 1990s, when Russian shipments were delayed partly for political reasons. Considering that Russia is the largest producer of palladium, the market imbalance caused a panic that eventually drove the price of palladium over \$1,100 in 2001. (See Figure 8.7.) Some of the major users at the time began to assume that the Russian supply problem would continue for years, most notably Ford Motor Company, which accumulated a massive stockpile of the metal. But the end result was an excess supply of palladium on

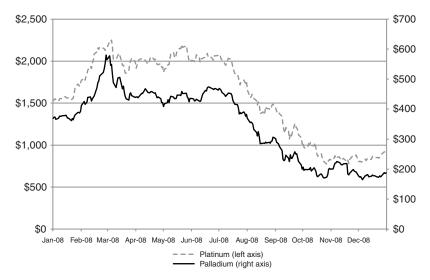


Figure 8.5 Platinum and Palladium Price Performance, 2008 SOURCE: Bloomberg.

the market (and a huge loss for Ford) that has kept the metal's price far, far below its 2001 peak going into a tenth year. However, the palladium market finally appears to be closer to balance, implying that the metal may start behaving like platinum, whose demand has outstripped supply year after year. One reason contributing to this is the fact that lower

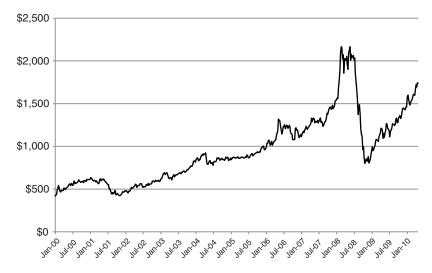


Figure 8.6 Ten-Year Platinum Price Chart Source: Bloomberg.

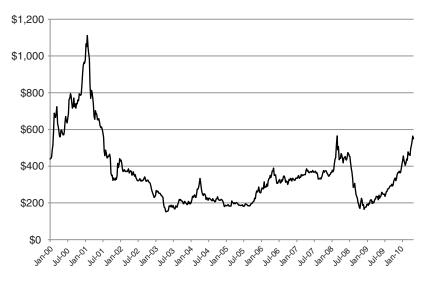


Figure 8.7 Ten-Year Palladium Price Chart

Source: Bloomberg.

palladium prices have helped push up jewelry demand while higher platinum prices have pushed down jewelry demand for that metal, as shown in Figure 8.8.

Investors in these metals should always keep in mind that platinum and palladium are similar to silver in that their prices are highly sensitive to the economic environment. Though investment demand for the metals is rising sharply, they are still not broadly perceived as having the same investment characteristics as gold, the only precious metal to rise in 2008. In that year, as a result of collapsing auto demand and weaker industrial production, PGM prices fell very sharply, with platinum losing over 40 percent and palladium close to 50 percent, as shown in Figure 8.5. Platinum and palladium are vital inputs in a great many applications, from cell phones to anticancer drugs, but when economic growth falters, demand for PGMs will falter as well; that's an inescapable fact. Even if the economic crisis of 2008 returned, there can be no certainty that investment demand alone could compensate for a sharp decline in industrial orders. Only gold has a proven record of being reliable investment insurance.

That being said, considering that the recent recession became the worst since the Great Depression and that the recovery has been very

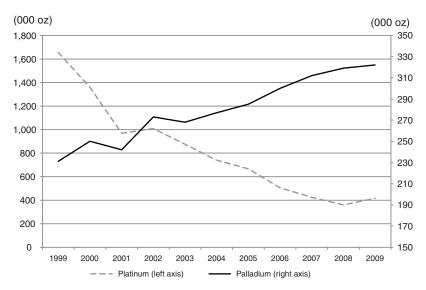


Figure 8.8 Jewelry Demand for Platinum and Palladium SOURCE: CPM Group.

weak so far, it is remarkable that both metals have recovered much of the ground lost as a result of the recession. And despite the price volatility, these PGMs have certainly fared better than the stock market since 2007; platinum, in particular, has more than tripled over the past decade while equities are flat. Although the sharp recovery in metals prices is partly explained by the economic rebound, they were also influenced by a new rise in investment demand: The substantial increases in platinum and palladium ETF purchases, respectively, partially compensated for weakness in demand from any particular industrial source.

The essential theme and investment concept of this book is that gold is recovering its position as a core asset in investment portfolios. This should have a significant effect on metals prices because the market is so small and the potential investment so large: A mere 2 percent shift from global equity and bond holdings into precious metals could make prices double and triple. Considering that prices of other precious metals—silver, platinum, and palladium—tend to move in the same direction as gold, a gold bull market implies a bull market for all, but in varying degrees. Although palladium has been held back, to some degree, by the supply overhang from 2001, both it and platinum have been

reacting to the increase in investment demand in a very different way because their markets are so very small. If a relatively small \$10 billion dollars (a few days of trading in Exxon shares) were to move into the combined \$11 billion palladium and platinum markets, the effect would be hard to visualize.

What differentiates platinum and palladium from gold is the low starting point for investment. Though forgotten over the past 40 years, gold has always been an integral part of the global financial system and, as such, it has always been an investment option. But, although one could have invested in platinum and palladium mining companies, the two P's only became truly investable for anybody as pure metals in the past few years thanks to the listing, in London and Zurich by ETF Securities and the Swiss Zürcher Kantonalbank (ZKB), of exchange-traded funds, whose inflows continue to surge. And in January 2010—that is, the year of publication of the book in your hands—two new platinum and palladium ETF funds were allowed to be listed for the first time in the United States by ETF Securities (ETFS), which opened investment in the metals to the largest investor base in the world. (See Figures 8.9 and 8.10.) The exchange-traded funds, which effectively remove platinum and palladium supply from the market as shares are completely backed

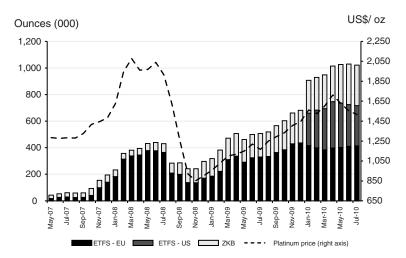


Figure 8.9 Platinum ETF Holdings, 2007–2010 Source: Macquarie.

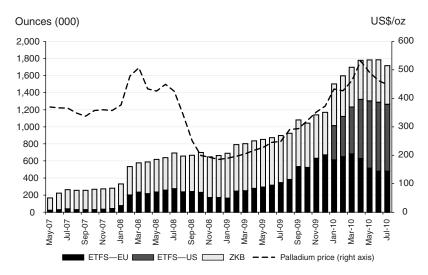


Figure 8.10 Palladium ETF Holdings, 2007–2010

Source: Macquarie.

by physical deposits of the metals in vaults, have become a major driver of demand for the metals.

Here are some basic investment pros and cons to consider before investing in platinum or palladium.

Investment Considerations for Platinum and Palladium

Pros

- 1. Correlated with gold.
- 2. Minuscule supply on market.
- 3. Almost zero fund ownership.
- 4. Central banks own none and hence cannot interfere in the market.
- 5. High Asian demand.
- 6. Takes many years to ramp up mining supply.

Cons

- 1. Provides no cash flows.
- 2. There is no reliable valuation metric.
- 3. Can perform poorly in recession (industrial demand significant).
- **4.** More volatile than gold.
- 5. Heavily reliant on auto industry demand.

Part Two

TAKING GOLD TO A HIGHER INVESTMENT LEVEL

Chapter 9

Taking Gold to a Higher Level: Creating Your Gold Portfolio

old is recovering the position it once held as a basic savings asset, one that a great many Americans used to own out of financial principle and prudence, at a faster pace than I thought could happen as I was writing *Buy Gold Now* during 2006 and 2007. When the popular financial TV personality Jim Cramer—no doubt a voice for mainstream stock market investors—openly recommends owning gold in a portfolio, as he does today, we know the public's attitude toward the metal has changed dramatically. Or perhaps it's just that we are going back to normal, a time when most investors held some gold or silver out of financial principle and prudence. Maybe the drama of gold, the

hyperbolic criticism of the metal as something to invest in only when the world is about to end, has been tossed into the drawer of defunct financial ideas, like the recently added concept of wealth creation via home equity extraction.

As I researched monetary history and the precious metals market—less as an academic than as a financial professional—for my first book, I struggled to determine the proper amount of gold I thought a person should own as part of a diversified personal portfolio. Considering the extraordinary financial implications of the approaching catastrophe at that time, which ultimately arrived in the fall of 2008, I wrote that somewhere between 8 and 15 percent would be reasonable. I found later that this was not far from what Frank Holmes, one of the world's preeminent precious metals fund managers, thought—that it should not represent more than 10 percent of an investor's portfolio.

This chapter is a point of departure from my first book because it takes a deeper look at gold investment by considering the idea of a gold portfolio that nonprofessional investors can design for themselves, just as many do for their stock portfolios. I wrote it thinking mainly of persons who, having understood the risks that accompany investing in a volatile asset, (1) are considering holding a larger portion of their overall wealth in gold, or (2) want to enhance their existing gold investment and aim for potentially higher returns (and thus might like to diversify within gold). One can always invest in gold via the physical market (coins and bars), exchange-traded funds (ETFs), individual mining or royalty stocks, derivatives, or by investing in a gold equities fund like the Gamco Gold Fund, Tocqueville Gold Fund, or U.S. Global Gold and Precious Metals Fund, all of which have strong performance track records. And no doubt there are a fast-growing number of investors who own any combination of precious metal coins, shares in ETFs (like GLD, SLV, or PLAT) and mining stocks, like Barrick or Goldcorp, and perhaps a few exploration stocks.

For investors who want to customize and organize their holdings into their own gold portfolio, based on personal thoughts about risk and potential return—as well as their opinions on, say, gold versus silver or different types of mining stocks—this chapter provides guidance. The portfolio considered differs somewhat from professionally managed portfolios like those previously mentioned because it takes diversification

Ticker	Name	5-day	20-day	60-day
ABX	Barrick Gold Corporation	6.08%	12.07%	17.52%
XAU	Philadelphia Gold and Silver Index	5.64%	11.17%	17.28%
GOOG	Google Inc. Class A	4.48%	10.15%	20.50%
WMT	Wal-Mart Stores	2.57%	4.76%	7.22%
SPX	S&P 500 Index	2.54%	5.08%	9.40%

Table 9.1 Standard Deviation of Rolling Returns (Five-Year Data as of End 2009)

Source: Bloomberg.

to another level by including physical precious metals. This literally adds another dimension to the gold portfolio, placing part of it outside the financial system itself by adding assets that can be held in your hand. One could always own a few stocks, a few coins, and an ETF or two, but the gold portfolio considered in this book may help you approach your hard money investments more deliberately and systematically. Although you may feel this chapter is for beginners, the approach follows the broad guidelines that professional fund managers use when setting up a portfolio of any kind. And the most important guideline for any fund manager is to understand the risks he is taking.

The gold portfolio I propose is a collection mainly of precious metals stocks and ETFs (including those based on three other metals) that tend to move in gold's direction with varying intensity (see Table 9.1), much like stocks in your portfolio can move alongside a broad stock index with the hope that you will outperform the overall market. It is important for the reader to understand that the gold portfolio's primary goal is to outperform gold itself, hence taking gold investment to a higher level. After a vital note of caution presented in the next paragraph, this chapter walks you through what I see as the basic decision–making process that will lead to setting up a gold portfolio that you can feel comfortable with. (See Figure 9.1.)

Gold presents a unique investment opportunity as I believe its price will rise substantially higher, but I write this fully aware of how many investors have been wrong in their financial expectations for the future. Taking gold investment to a higher level means elevating potential return and risk. Before reading on, please consider something important from my previous book about gold: Keep in mind that once you get over

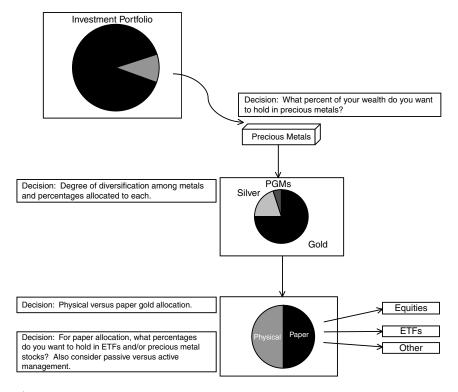


Figure 9.1 Investment Decision Tree

holding, say, 20 percent of your assets in gold you are expressing the conviction—with me—that gold will outperform other financial assets over the next few years, which is educated speculation.

Even if you share these views, don't think you are being conservative by concentrating your assets in gold. If the \$95 billion Teacher Retirement System (TRS) of Texas that I work for moved 30 percent of its assets into gold, this would be highly imprudent and our chief investment officer would likely be fired (and rightly so). No matter the financial environment, concentrating investment in a single asset class is always a risky proposition. However, we are living in extraordinary times. I believe the risks in other asset classes, like stocks and bonds, are significant, and I have moved away from them and increased *my* investments in precious metals. There are several important key drivers of gold today, as described earlier in this book. However, to put it very simply: Unless today's fiscal

imbalances and monetary gymnastics continue—and/or people want to hold an increasing portion of assets in precious metals—one can't expect an inert rock to outperform financial assets that grow or pay interest over the long term.

Constructing Your Gold Portfolio

You need to be clear on this point: The gold portfolio should be a *subset*, a fraction of your overall financial assets.* The gold portfolio considered in this chapter *is not a diversified portfolio*. As such, the portfolio construction process (as described in Figure 9.1) will be different from what a traditional financial planner would follow in considering the risk and expected return characteristics of a diversified portfolio of stocks, bonds, commodities, real estate, and cash. Much like a Russian equities portfolio or an energy sector ETF focus on a specific region or sector, this is a highly concentrated bet on precious metals. As such, *risk* will be regarded simply as the degree to which a stock, ETF, or physical asset (like a gold coin) behaves differently from the price of gold, which you can think of as our performance anchor, since gold is what we are trying to outperform.

For example, a recently listed mining exploration stock that is years from producing a refined ounce of gold (think about a bunch of ready-to-dig people with shovels and a plot of land) would be regarded as a high-risk stock since its price performance would likely deviate substantially from the price of gold, even if it followed the metal's trend. (The risk logic is simple: An ounce of gold held in your hand is more certain than the *possibility* of getting five ounces of gold in five years, so an exploration stock will be more volatile. You're betting on the future.) Conversely, a gold ETF, like GLD, the world's largest, is regarded as having *almost* no risk. Risk *in the context of our gold portfolio* is not good or bad; it merely describes how the performance of an individual asset (like a mining

^{*}This applies to human beings for whom money is a scarce asset. I believe Keynes said (though I have not been able to find the quotation again) that the poor should never speculate, but that the rich should always. If you are someone who uses gold coins as poker chips in three-foot-high stacks, perhaps you can dispense with financial prudence.

stock making up 5 percent of a gold portfolio) can vary from the price of gold.

A few important points regarding the gold portfolio:

- **1.** Understand the portfolio's only aim: to outperform the price of gold. Do not think you are being conservative, reducing risk in your financial assets, by investing in a gold portfolio.
- **2.** You need to be comfortable with this fact: This is a higher-risk portfolio than most. Do not think you are being conservative or risk-averse by owning precious metals or precious metals—related stocks.
- **3.** Rebalancing is something to consider. The gold portfolio will be volatile and the exposure percentages selected initially are likely to shift.
- **4.** Gold is not a loved asset class; be prepared for changes in rules of the game. Nobody will cry if the government suddenly decided to hike the tax rate on gold miners. Leaders could suddenly decide to raise the capital gains tax on precious metals substantially higher.
- **5.** Don't forget that stocks are a tricky asset. Even if gold is rising, gold stocks can underperform with others for many reasons.
- **6.** Quality of management is more important with gold than for most stocks. You will never see the resources or reserves that any mine has underground. You need to feel comfortable with what management tells you.
- **7.** *Don't put all your eggs in a golden basket.* The gold portfolio should be part, a fraction of a larger portfolio of diversified assets.
- **8.** Be prepared for volatility. You should expect this portfolio to be more volatile than the stock market (as shown above in Table 9.1), regardless of whether gold goes up or down.
- **9.** Risk is defined as how much a stock, ETF, or physical asset moves differently from the price of gold. Risk, as defined herein, is only relative to the price movement of gold.
- **10.** The return will not be the return on gold. The return of the gold portfolio, unless it is 100 percent invested in a gold ETF or gold bullion, will not be the same as the return of gold itself.
- **11.** *In a bear market for gold, don't think defensive gold stocks will not go down with the metal.* There can be extraordinary stocks (a precious few) in

- other sectors that can go up when the stock market goes down. If precious metals are going down, you can be certain the gold stocks will go down with them—and probably more sharply.
- **12.** The gold bull market will end. This may seem obvious, but once monetary stability returns along with very attractive valuations for stocks, bonds, and other assets, gold will become less attractive and bear markets can endure.

Table 9.2 will give you a sense of risk for the various assets that go into a gold portfolio.

Regarding expected returns, another consideration for a financial planner constructing a fully diversified portfolio, this is not something one can estimate with any precision. Financial planners, as part of the portfolio construction process, either calculate or use another forecaster's anticipated returns for stocks (typically expecting a return of around 8 percent per year), bonds, and other asset classes to arrive at a combined portfolio expected return. But as I pointed out in Chapter 6, I believe that the metal only became a modern investment asset beginning in 1971. And if you follow the logic I presented in that chapter, gold is only in its second true bull market, which makes estimating its future price extremely difficult.

Although gold's price cannot be predicted with any reliable model, which is one reason the metal is often criticized as a financial asset, one has to ask how reliable Wall Street's models have been for equities. Did any of them predict that stocks would be down during the past 10 years? A major European financial strategist suggested in early 2010 that stock valuations, which some believe are lofty compared with history, suggest equities could return a mere 1.7 percent per year over the next decade.² But let's face it: Nobody has a crystal ball and for all I know, we may be

Low	Medium	High
SPDR Gold Trust (GLD)	Ishares Silver Trust (SLV)	Junior miners
American Eagle gold coin Senior producers	Silver equities	Platinum Palladium

Table 9.2 General Sense of Risk in Various Precious Metals Investments



Figure 9.2 Gold Price Performance, 1971 through January 2010 SOURCE: Bloomberg.

on the verge of another stock market boom, unlikely as that may seem. If anything, the past decade of stock market booms and busts, as well as the real estate disaster, prove that diversification of your total portfolio is always very important—and, unfortunately, most financial planners until very recently did not think of gold when considering diversification. The big surprise with gold over the past decade is that the metal outperformed stocks in both the bull and bear markets. (See Figure 9.2 and Table 9.3.)

Considering that the world's money supply will invariably be growing faster than the supply of gold—which, as discussed in Chapter 6, grows at around 1.5 percent per year—it is to be expected that over the long run the price of gold will appreciate. Although I believe there are key drivers, as outlined in this book, that are likely to drive gold higher in the years immediately ahead, it is difficult to predict where gold's price will be in the near future with any precision. And if you believe, as I do, that gold is likely to rise sharply higher, you can also expect *tremendous volatility*, which makes your decision even more difficult. This is why you need to carefully consider what portion of your wealth you would like to hold in gold.

(Weekly Pricing)	
1971–1980	1,267.5%
1980–2000	(51.0%)
2000-2010	292.4%

 Table 9.3
 Gold Performance for Selected Time Periods

Source: Bloomberg.

Decision Outside the Gold Portfolio: What Percentage of Your Total Wealth Do You Want to Hold in Gold?

This is a personal decision that is *outside the gold portfolio*, best made with a certified professional financial adviser. I cannot provide guidance here because every individual has a different financial situation. Absent professional financial advice, if you decide to go ahead with your decision, this might be the best way to consider how large a gold portfolio to own as a percentage of your wealth: Rather than thinking about how much you want your gold portfolio to appreciate, think about how badly a decline in value would hurt you, which is to say, how much it would affect the sum of your total investment portfolio. If the price of gold fell 15 percent over the next year, it is most likely that the gold portfolio would decline more sharply. Considering your age, financial position, and future spending needs and desires, could you absorb such a shock? Furthermore, considering that the gold portfolio is likely to represent less than a third of your total investable wealth, does it even make sense to own one? If you are thinking of owning a gold portfolio of less than \$5,000, it might make sense to just own gold directly, either via physical coins or through ETFs.

I understand that most readers are not in a position to say, "Hmmm, should I put four million or six million dollars of my wealth in gold?" For those who are fortunate enough to be able to think in seven or eight figures (or more!), I congratulate you. For other readers who simply have decided that they want to move a substantial part of their assets out of traditional investments, like stocks and bonds, and take a big chance on gold—which I don't recommend—please be careful and keep in mind

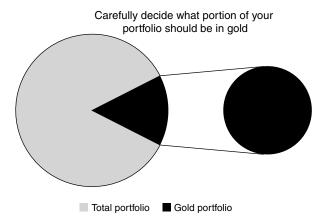


Figure 9.3 Portfolio Allocation

that a gold portfolio will be volatile. Rolling the dice with most of your wealth on gold is not a good idea, particularly if you are in a financial situation or stage in life where you could not recover from a big loss. Any asset that has the potential to rise substantially and rapidly, as I believe is the case with gold, will also have the potential to fall sharply, at least in the short term. Deciding what percentage of your wealth to hold in gold is probably the most important decision you will make. (See Figure 9.3.)

Gold Portfolio Decision One: Degree of Diversification Among Metals

Silver, platinum, and palladium are the only three precious metals other than gold that are truly investable, considering the existence of ETFs and mining stocks that allow investors to gain direct investment exposure to them. Other precious metals are produced in such small quantities that it is unlikely this will change any time soon, unless some large diversified mining company decides some day to spin off a way to play, say, rhodium or iridium, which has very low probability. This makes this segment of the decision tree easier to consider: You need to choose between four metals in the gold portfolio. Of course, some readers may have already

	2009 Supply (\$ Million)	5-Day	20-Day	60-Day
Gold	\$121,609.3	2.59%	4.95%	7.34%
Silver	\$12,976.8	4.22%	8.14%	13.51%
Platinum	\$8,289.5	3.44%	7.11%	13.06%
Palladium	\$1,913.6	5.17%	11.49%	19.96%
S&P500	n.a.	2.72%	5.08%	8.53%

Table 9.4 Standard Deviation of Rolling Returns from 2000 to End-2009

Source: World Gold Council, the Silver Institute, Bloomberg.

thought of the possibility of four separate portfolios, one for each metal, which is certainly an option, but I'll keep this simple.

Table 9.4 shows each metal's *volatility* (basically, the relative rate at which a metal's price moves up or down), which is the most important consideration at this stage in the investment process. On one summer day in 2006, I remember watching silver fall about 10 percent—in one day. I still don't know why. It just happened. Platinum and palladium can also be extremely volatile in part because so much of their demand comes from a single industry, autos. (See Chapter 8.) The demand for silver is far more diversified and has been regarded (in the form or coins and bars) as an investment vehicle for thousands of years in countries like India, which is not the case for platinum and palladium. Coins have only been available for these two metals for a few years and ETFs were launched very recently.

During 2008, one of the worst periods ever for commodities, all three metals experienced extreme volatility and fell very sharply at several points during the year. Gold was the only major commodity to rise in value during that terrible year, when stocks plunged around 40 percent, once again demonstrating that the metal is one of the few truly noncorrelated financial assets. The gold market is substantially larger and deeper than those of the other metals and the demand base is broad. In my opinion, this will change gradually over time as more investors begin to consider deepening their exposure to precious metals (particularly because it is far easier to do so because of the existence of ETFs for these metals, which are not even five years old), but gold should remain the least volatile and most important of the four metals, as seen in Table 9.4.

What this means is that higher percentages of silver, platinum, and palladium in your gold portfolio will make your investment performance increasingly volatile. To illustrate this fact, let's look at two portfolios and place them in three different investment periods to show what this means in practice. First, let's make the "conservative" precious metals portfolio hold 70 percent in gold, 20 percent in silver, and 5 percent each in platinum and palladium. (Keep in mind that *conservative*, just like the word *risk*, as discussed earlier, is relative to gold. The conservative portfolio would actually be volatile in the context of a broader diversified portfolio of stocks, bonds, real estate, and cash.) The "risk-taking" precious metals portfolio will hold 20 percent in gold, 20 percent in palladium and 30 percent in each of the other two metals. The time periods will be 2008, 2009, and the 1999–2009 decade. The performance results are shown in Figures 9.6 through 9.8.

The results demonstrate what most people who have made investments over long periods of time are familiar with: High risk can result in high reward—or a sharp decline. The decade of the 2000s was a phenomenal one for precious metals, but in 2008, it paid to have a higher exposure to gold, the safer of the four. Considering the balance of risk

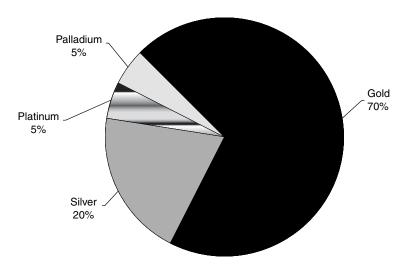


Figure 9.4 "Conservative" Portfolio

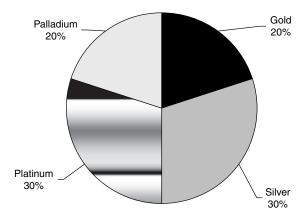


Figure 9.5 "Risk-Taking" Portfolio

and reward within the context of the gold portfolio, I think holding 70 percent in gold, 20 percent in silver, and 5 percent each in platinum and palladium might be a fairly reasonable balance of holdings. I use these percentages for the hypothetical Hard Money portfolio that I form next as an example. Figure 9.9. shows a simple gold portfolio, one of

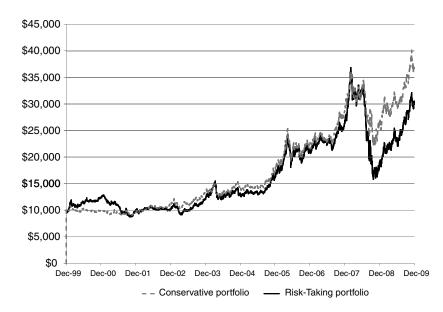


Figure 9.6 Ten-Year Performance

Sources: Bloomberg, Author.



Figure 9.7 2008 Performance (Down Market)

DATA SOURCE: Bloomberg.



Figure 9.8 2009 Performance (Up Market)

Data Source: Bloomberg.

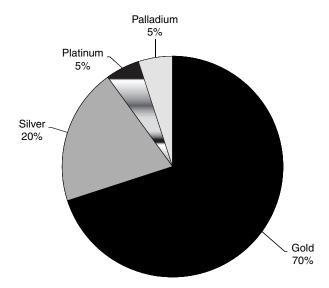


Figure 9.9 Hard Money Portfolio

the many you can create based on your own preferences, that will result from the basic decisions followed in this chapter.

Decision Two: What Part of Your Gold Portfolio Do You Want to Hold in ETFs and What Part in Precious Metals Stocks?

For your portfolio to be *able to* beat the price of gold, you will need to have exposure to mining and other types of stocks that are related with gold, like royalty companies. As discussed in Chapter 11, mining stocks provide leverage to gold, which is to say that they can appreciate faster than the price of gold. (But, as you guessed already, there are some gold stocks that, due to any variety of reasons—anything from operational problems to political interference to mismanagement—*will not* appreciate faster than gold!) The effect of leverage is shown in Figure 9.10, which depicts the performance of Kinross Gold Corporation compared with gold over the past three years.

As you can see, a mining stock (and we can use Kinross as a proxy for many mining stocks' directional movements relative to gold) tends

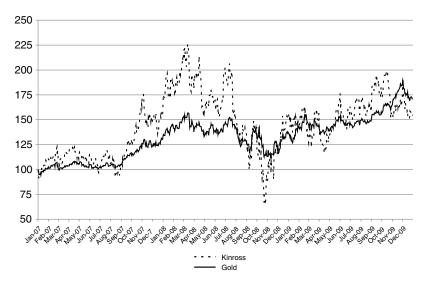


Figure 9.10 Kinross versus Gold Source: Bloomberg.

to outperform gold when the metal's price is rising and do the opposite when gold is falling. This volatility can be insulated to some degree by the inclusion of a gold ETF in the portfolio, as it will move in line with the price of gold because an ETF provides *representative* ownership of actual gold. Similarly, silver, platinum, and palladium ETFs will be less volatile than stocks related with those metals—like Hecla (silver), Acquarius (platinum), and Stillwater (palladium)—but all of these plays on other metals will be more volatile than gold.

So here's the trade-off you need to consider in this decision: Do you want to hold more stocks, which gives you potentially more upside than a gold ETF in a rising gold market? Or do you want to hold a larger investment in a gold ETF, which will dampen the volatility in the portfolio? As such, this key decision for your portfolio boils down to determining *how much leverage* you want to the price of gold, which, as you may have guessed already, is a double-edged sword: The more leverage you have to gold, the more volatility your portfolio will have relative to the price of the metal, a *risk* that we defined earlier. Presumably, you would want to hold at least 30 percent of your portfolio in stocks

because the lower the percentage held in equities, the more your portfolio will perform like the price of the metal. And if you have a portfolio that is moving roughly in lockstep with gold, then it might make more sense to just put the whole portfolio in a gold ETF and save the trading costs! Since the objective we set is to outperform gold, it makes sense to want the portfolio to be somewhat different from gold, which means owning stocks.

Of course, the *actual* stocks you select to hold in your portfolio will also influence performance. But for now, we are going to use the term *stocks* generically as if you were buying a *diversified* (remember, these are precious metals stocks only) basket of mining stocks based on the 16 stocks in the widely followed Philadelphia Gold and Silver Index (XAU). (See Table 9.5.) This is a benchmark that I use in the management of the GBI Gold Fund at the pension fund I work for. Now, 16 stocks in a benchmark is not very high diversification. The degree of diversification is lower than that of the Dow Industrials Index, which contains 30 stocks, and far below that of the S&P 500 (500). But keep in mind that this index is a concentrated one based on precious metals: Volatility is to be expected.

You should decide what percentage of equity holdings you feel is proper for your portfolio. But for the hypothetical Hard Money portfolio, let's put 40 percentage points of the gold holdings we have in stocks. Remember that we allocated 70 percent to gold, 20 percent to silver, and 5 percent each to platinum and palladium, so we're taking 40 of the 70 percentage points to put them into stocks for our theoretical portfolio. And for simplicity, let's keep the other metals (30 percent of the portfolio in total) in ETFs, as shown in Figure 9.11. One thing that slightly complicates our allocation decision is that the XAU also contains silver stocks. (Purists also need to be aware that most so-called gold stocks also produce silver and many other metals as by-products in their production process, even though most revenues are derived from gold.) As such, we can't neatly insert the XAU stocks into the gold portion of our portfolio (the 70 percent) because of the silver stocks. Fortunately, this is not a major issue since these stocks would only amount to 40 percent of the theoretical gold portfolio we are putting together as an example, and remember that silver is highly correlated with gold.

Table 9.5 XAU Index

Name	Market Cap	% Weight in the Index	Country of Domicile	Gold Production (mm oz)	Silver Production (mm oz)
Barrick Gold Corp	\$44,953,130,000	18.26	CANADA	7.42	n.a.
Freeport-McMoRan Copper & Gold Inc	\$31,583,290,000	16.60	UNITED STATES	2.41	n.a.
Goldcorp Inc	\$34,167,020,000	13.55	CANADA	2.40	n.a.
Newmont Mining Corp	\$28,851,010,000	11.96	UNITED STATES	6.52	n.a.
AngloGold Ashanti Ltd	\$15,664,490,000	6.63	SOUTH AFRICA	4.98	n.a.
Kinross Gold Corp	\$13,400,230,000	5.85	CANADA	2.47	n.a.
Agnico-Eagle Mines Ltd	\$10,202,180,000	4.42	CANADA	0.49	4.04
Gold Fields Ltd	\$9,795,592,000	4.21	SOUTH AFRICA	3.42	n.a.
Cia de Minas Buenaventura SA	\$10,187,450,000	3.82	PERU	0.01	15.50
Yamana Gold Inc	\$8,516,418,000	3.51	CANADA	0.84	10.50
Randgold Resources Ltd	\$8,199,176,000	3.42	JERSEY	0.49	n.a.
Silver Wheaton Corp	\$7,176,354,000	2.80	CANADA	.01932	16.18
Harmony Gold Mining Co Ltd	\$4,467,796,000	1.90	SOUTH AFRICA	1.46	n.a.
Pan American Silver Corp	\$2,979,414,000	1.27	CANADA	0.10	23.00
Royal Gold Inc	\$2,578,969,000	1.08	UNITED STATES	n.a.	n.a.
Silver Standard Resources Inc	\$1,601,230,000	0.71	CANADA	n.a.	n.a.

Source: Bloomberg.

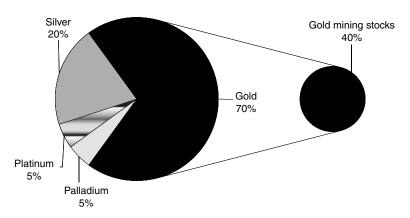


Figure 9.11 Theoretical Gold Portfolio with Mining Stocks

Decision Three: What Part of Your Gold Portfolio Do You Want to Be in Physical Gold and What Part in Paper Gold?

Physical gold is something to own for the "what if" possibilities in financial life, possibilities that may have drawn you to read this book. If there were no risk of a failure of government and the financial system, in today's age of sophisticated electronic finance there would be no rational reason to own physical gold bullion. Bullion bars or coins are more costly to trade, more difficult to own, and—let's face it—people look at you in a funny way when you admit to investing in them. While so called "gold bugs"—many of whom prefer owning gold in physical form—are often derided on Wall Street, there can be no denying that physical gold owners are happier than many owners of paper assets today. Not only has gold itself remained in a bull market, the premium coins' command over spot as a result of scarcity of many types of gold coins has been rising in recent years, giving their owners an additional gain. (This is discussed in Chapter 14.)

I think physical gold is very important, but owning precious metals in coin or bar form is not for everyone. (You can read more about this corner of the gold market in Chapters 12 through 15.) But for the sake of our theoretical Hard Money portfolio, I will assign 10 percentage points of the gold portfolio and 5 percentage points of the silver fraction

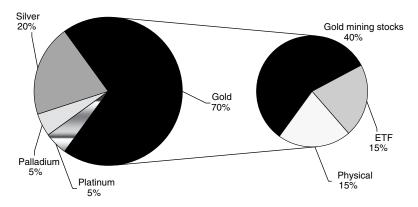


Figure 9.12 Theoretical Gold Portfolio with Physical Gold and ETFs

of the portfolio to physical forms of these metals. (See Figures 9.12 and 9.13.) Although the cost of trading physical precious metals is higher, the physical gold and silver being included in the portfolio will move in value roughly in line with their respective ETFs, so moving 15 percentage points of paper gold and silver (the ETFs) into physical gold and silver will not have a significant effect on the portfolio, even though the trading costs associated with physical purchases will be higher. (There

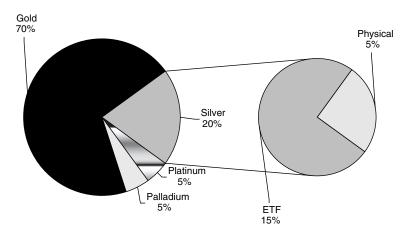


Figure 9.13 Theoretical Gold Portfolio with Physical Silver and ETFs

would be no noticeable effect on the portfolio if you think there is no need to own physical gold and prefer to keep this part of the portfolio in ETFs.)

Decision Four: Do you Want to Roll Up Your Sleeves and Pick Stocks, or Do You Want to Have Passive Exposure to Gold Stocks?

If you want to manage your gold investments more actively, taking greater risks with the hope of making greater gains, you need to spend more time understanding the precious metals mining world. It is here that the largest fortunes have been made in gold, and this is also where much has been lost. It is a challenge, as there are more complicating factors than one finds in many other sectors of the stock market, from tech stocks to retailers. For one, you can personally walk through a Wal-Mart and drive a Volkswagen—you can truly feel the business in more ways than one before making an investment. Much of what makes a great retail operation and a great auto is visible and can be experienced firsthand. But walking through an underground gold mine in Peru or Canada—typically an experience lasting less than an hour or two for visiting investors—will not give you much of an idea of what's in the ore and how much gold will be extracted profitably from it in the years ahead. "Gaining market share" and other such investment catch phrases mean completely different things in the mining world.

A halfway point between holding your stocks passively and picking each yourself is to invest in one or several gold funds so that your active bets are managed professionally. Gold funds with the best tenyear track records include those managed by investment firms GAMCO, Tocqueville, USAA and U.S. Global. The four have worked through both bear and bull gold markets and their funds have impressive investment performance. By investing in a mining equities—concentrated gold fund, you can have a portfolio within your gold portfolio and leave the stock-picking to the experts.

For the sake of the theoretical Hard Money portfolio we will assume passive management—that is, stocks in this portion of the pie will be

Table 9.6	Theoretical Hard Mone	y Portfolio with	Passive Management
-----------	-----------------------	------------------	--------------------

						Perce Metals	
	Total	Physical	Paper	Equities	Metals	ETFs	Coins
	100	20	80	40	60	66.7	33.3
Gold	70						
Coins		15			15		15
ETFs			15		15	15	
Stocks			40	40			
Silver	20						
Coins		5			5		5
ETFs			15		15	15	
Stocks			0	0			
Platinum	5						
Coins		0			0		0
ETFs			5		5	5	
Stocks			0	0			
Palladium	5						
Coins		0			0		0
ETFs			5		5	5	
Stocks			0	0			

decided by their corresponding percentages in the XAU index. (See Table 9.6.) As such, the portfolio will not be taking on stock-specific risk, which would come from investing, say, 25 percent of the portfolio in Yamana Gold, a single stock. This 25 percent would be part of the 40 percent that we have allocated to stocks in the theoretical gold portfolio. (We haven't changed our allocation to stocks.) But, of course, the portfolio characteristics could also be changed by moving from 40 percent in stocks to 65 percent in stocks, with the consequent increase in risk and potentially higher—or lower—returns. For those wanting to take on stock-specific risk based on your specific views on individual gold stocks, Chapter 11 is for you. Table 9.7 shows how the theoretical Hard Money portfolio would have performed compared with the S&P 500 index over three recent periods. Keep in mind that past performance is no indication of future performance. Evidently, a repetition of this stellar performance cannot be predicted for the future.

	Pr	o-Forma Perform	nance
	2008	2009	Five year
Hard Money portfolio	(14.6%)	38.6%	128.2%
Excess return versus SPX	23.9%	15.2%	136.2%

Table 9.7 Pro Forma Performance of Theoretical Gold Portfolio

Source: Bloomberg.

Managing Your Gold Portfolio

A traditional stock portfolio can be viewed from a variety of vantage points: Not only can you look at its combined characteristics (valuation, market cap, and others), but also considering exposure by region and sector. Similarly, if you launch a gold portfolio following the steps above and set it up on a spreadsheet, you will find that it can be observed from several vantage points implied in the decisions made earlier. Glancing at the theoretical gold portfolio shown in Table 9.6, we find these decisions reflected in the exposures:

- Precious metals allocation (decision: percent of portfolio held each in gold, silver, platinum, and palladium). This reflects the degree of diversification among four metals (regardless of whether they are owned in equities or via an ETF or coin or bar), with gold being the least volatile. Percentages are shown in the first numerical column. Seventy percent of the theoretical Hard Money portfolio is invested in gold, with the remaining 30 percent divided into 20 percent in silver, and 5 percent each in platinum and palladium.
- Precious metals vs. equities allocation (decision: percent of portfolio held in stocks). This reflects, in part, how much leverage to the gold price you want to insert into your portfolio. The theoretical Hard Money portfolio provides a fairly modest exposure to gold equities, with 40 percent invested in stocks and the remaining 60 percent in the metals themselves (as shown in the fourth and fifth numerical columns). This 40 percent provides passive exposure to stocks, which means the stocks will be allocated based on percentages in the XAU index of large-cap precious metals mining and royalty stocks.

- Allocation to ETFs versus physical precious metals (decision: percent of gold portfolio held physically). In our theoretical Hard Money portfolio, 60 percent is held in nonequity precious metals. Of this exposure to precious metals, 75 percent is held in ETFs (with allocations to all four metals) and 25 percent in physical gold and silver. (As discussed in Chapters 10 and 12, it is important to understand that owning a precious metal ETF, which is an asset representing ownership of a set amount of a metal, is not the same thing as owning a coin or bar.)
- Active versus passive equity management (decision: whether to actively manage the stock portion of the portfolio—that is, to have equity exposure that is different from the XAU index). As mentioned in the second bullet point, the theoretical Hard Money portfolio assumes passive stock exposure because active management implies a virtually infinite set of possibilities. Chapter 11 provides some initial guidance for stock pickers.
- Allocation to individual stocks (decision: in an actively managed portfolio, allocation given to individual stocks). Allocating a greater part of the portfolio to individual stocks can detract from diversification (within the precious metals space), but can provide leverage to the gold price. (Remember that even silver-, platinum-, or palladium-driven stocks provide leverage to the gold price, as these metals are highly correlated with gold.) As an example, reducing the number of stocks from the 16 in the XAU index to, say, 8 will increase the portfolio's volatility as well as the potential upside (and downside).

The theoretical Hard Money portfolio was presented merely as an example of what a gold portfolio can look like, but evidently a portfolio can be constructed in many different ways. Following are six potential portfolios that tilt the gold portfolio in different directions, as shown in Tables 9.8 to 9.13. Like the theoretical gold portfolio previously presented, these are by no means portfolios I am recommending that readers set up for themselves. Each of them has specific risks and returns expectations. Each portfolio accentuates and shows the effect of tilting a portfolio in a certain direction. I added physical metal to all the portfolios, except for the ones where equity positions are high, out of personal preference. You can replace these physical investments with ETFs without having any major effect

Table 9.8 All Gold Portfolio

							cent of Held in
	Total	Physical	Paper	Equities	Metals	ETFs	Coins
	100	25	75	50	50	50	50
Gold	100						
Coins		25			25		25
ETFs			25		25	25	
Stocks			50	50			
Silver	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			
Platinum	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			
Palladium	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			

All gold p	ortfolio -	- pro-forma performance	•
2008	2009	Five year	
(11.4%)	30.1%	115.6%	

on the pro forma past performance of the portfolios. (The performance in 2008 and 2009 would have been the same.) Remember the universal disclaimer you see in the fund management industry: *Past performance is not an indication of future performance.*

- **1.** *All gold portfolio.* The name says it all, with equal allocations given to gold and gold stocks.
- **2.** *Silver tilt portfolio.* The objective is to adjust the weightings in the portfolio so as to be heavily influenced by silver's price direction. It also inserts a substantial investment in silver equities.
- **3.** Two P's portfolio. This is similar to the silver portfolio, although the objective is to make the portfolio be influenced by the direction of platinum and palladium.

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Table	ч	ч	Silver	1111	$P \cap$	rttalia

							cent of s Held in
	Total	Physical	Paper	Equities	Metals	ETFs	Coins
	100	20	80	40	60	66.7	33.3
Gold	30						
Coins		10			10		10
ETFs			10		10	10	
Stocks			10	10			
Silver	70						
Coins		10			10		10
ETFs			30		30	30	
Stocks			30	30			
Platinum	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			
Palladium	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			

Silver tilt	portfolio	- pro-forma performance	e
2008	2009	Five year	
(29.9%)	60.3%	224.0%	

- **4.** Equal metals portfolio. This portfolio gives a 25 percent weighting to each of the metals and gives exposure to related equities.
- **5.** Equal metals—ETF only. Same as number 4, but holding only ETFs.
- **6.** Gold equity tilt portfolio. This portfolio has a heavy position in gold equities based on the XAU.

Portfolio Rebalancing

Considering the significant volatility of precious metals and the equities related to them, if you launch your own gold portfolio, you will notice that your exposures will change—sometimes very significantly—fairly

Table 9.10 Two P's Portfolio

							of Metals
	Total	Physical	Paper	Equities	Metals	ETFs	Coins
	100	20	80	20	80	75.0	25.0
Gold	30						
Coins		10			10		10
ETFs			10		10	10	
Stocks			10	10			
Silver	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			
Platinum	40						
Coins		5			5		5
ETFs			25		25	25	
Stocks			10	10			
Palladium	30						
Coins		5			5		5
ETFs			25		25	25	
Stocks			0	0			

 Two P's portfolio - pro-forma performance

 2008
 2009
 Five year

 (32.0%)
 66.6%
 103.6%

rapidly. For example, if gold is moving higher, equities are likely to move at an even faster pace, which means that they would become a larger part of the portfolio as the percentage of gold would decline—and the opposite would happen in reverse. (For example, the 40 percent held in equities in our theoretical portfolio could rise to 44 percent.) Similarly, if silver outpaces gold, your silver exposure would increase (say from 20 percent to 24 percent), and the same applies to the other metals. And if precious metals are weakening, it is most likely that gold ETFs and coins/bars would decline the least (so gold exposure could rise from 30 percent to 32 percent). If an individual stock in the portfolio rises or falls significantly, this would also affect all the percentages in the portfolio.

Table 9.11	Equal Metals Portfolio
-------------------	------------------------

							ent of Held in
	Total	Physical	Paper	Equities	Metals	ETFs	Coins
	100	35	65	25	75	53.3	46.7
Gold	25						
Coins		10			10		10
ETFs			5		5	5	
Stocks			10	10			
Silver	25						
Coins		10			10		10
ETFs			5		5	5	
Stocks			10	10			
Platinum	25						
Coins		10			10		10
ETFs			10		10	10	
Stocks			5	5			
Palladium	25						
Coins		5			5		5
ETFs			20		20	20	
Stocks			0	0			

Equal me	tals portfo	lio - pro-forma performance
2008	2009	Five year
(33.8%)	69.0%	143.26

This is one of the frustrations of fund management: things are moving all over the place!

There are several ways of managing this portfolio drift that professional managers use so they can *rebalance* back to the exposures in the original portfolio. Some use strict rules that require rebalancing once a given percentage of a portfolio (say, the exposure to equities in a diversified portfolio containing bonds) moves as little as two percentage points. But for the sake of an individual person's portfolio, it is best to use common sense and consider the costs. Rebalancing implies incurring trading costs (and trading costs for physical gold, it should be pointed out, are higher than those of equities and ETFs); so, unless you want to

	-		•				
							cent of s Held in
	Total	Physical	Paper	Equities	s Metals	ETFs	Coins
	100	0	100	0	100	100.0	0.0
Gold	25						
Coins		0			0		0
ETFs			25		25	25	
Stocks			0	0			
Silver	25						
Coins		0			0		0
ETFs			25		25	25	
Stocks			0	0			
Platinum	25						
Coins		0			0		0
ETFs			25		25	25	
Stocks			0	0			
Palladium	25						
Coins		0			0		0
ETFs			25		25	25	
Stocks			0	0			

Table 9.12 Equal Metals—ETF Only Portfolio

Equal meta	als ETF o	nly portfolio - pro-forma performance	
2008	2009	Five year	
(26.3%)	61.9%	127.0%	

strictly maintain the percentages you have determined for your portfolio even after the slightest of changes, you might agree that it doesn't make sense to rebalance a portfolio if it has not changed all that significantly. (Keep in mind that a gold portfolio will be volatile, so its percentages will likely shift significantly more than another type of portfolio would.)

For example, if the equities held in your portfolio rose from 40 percent to 42 percent, it probably would make sense to hold off on trading. However, if the exposure rose to, say, 45 percent (or any percentage that began to make you uncomfortable) you might want to rebalance back to your original positions. Others might decide to leave the portfolio alone and/or determine new percentages based on changes in the portfolio and new views on precious metals. For instance, if silver were rising

Table 9.13	Gold Equity	Tilt Portfolio
-------------------	-------------	----------------

							cent of s Held in
	Total	Physical	Paper	Equities	s Metals	ETFs	Coins
	100	15	85	60	40	62.5	37.5
Gold	75						
Coins		10			10		10
ETFs			15		15	15	
Stocks			50	50			
Silver	25						
Coins		5			5		5
ETFs			10		10	10	
Stocks			10	10			
Platinum	0						
Coins		0			0		0
ETFs			0		0	O	
Stocks			0	0			
Palladium	0						
Coins		0			0		0
ETFs			0		0	0	
Stocks			0	0			

Gold equity	v tilt port	tfolio - pro-forma performance
2008	2009	Five year
(22.7%)	42.1%	140.9%

significantly and gaining weight in the portfolio as a result, you might decide to keep the higher percentage in silver even though your portfolio characteristics have changed. Just keep in mind that there is always a trade-off between maintaining the percentages you have determined in your portfolio and the trading costs that are needed to keep them there.

Protecting Your Portfolio If You Believe the Price of Gold Will Decline

The value of any asset is vulnerable to the possibility of decline, and if you think—for whatever reason—that the price of gold is going to

fall, there are several ways to approach your concern. First, if you think the price of gold is going to begin a protracted decline, as occurred between 1980 and 1999, then you should probably consider reducing your exposure—particularly if you hold more than 10 percent of your assets in precious metals. This may seem obvious, but a great many investors hold on to stocks even when they are convinced equities will fall in value. They often hold on because they are long-term holders or due to tax issues or some other reason. Perhaps you share my view that everyone should always own some gold, but keep in mind that the precious metal will never beat stocks over the long run. Here's the main point: It might make sense to always own at least 40 percent of portfolio assets in stocks; the argument to do so can be backed by solid financial analysis. But there isn't solid financial analysis to support the view that it makes sense to always own more than, say, 25 percent of assets in gold.

If you think that gold is going to have a temporary setback (a technical pullback from some new high level that will bring the price down, say, 10 to 20 percent over the short term), then there are two main ways to hedge your gold portfolio-that is, to protect it from declining in value. How well you can hedge your portfolio will depend on the assets you hold in it. For instance, if you held 100 percent of the portfolio in a gold ETF, then hedging it would be fairly straightforward because you can find a vehicle that can match gold's movement in the opposite direction. But if you have a highly diversified portfolio containing exposure to all four major precious metals as well as equities, hedging perfectly becomes virtually impossible, although you can protect it against some of the downside. Hedging your portfolio basically involves buying an asset that will move in the opposite direction with the same magnitude. For example, if you think your portfolio could fall from \$10,000 to \$9,000—or from \$10 million to \$9 million—then you would want something that would rise by \$1,000 or \$1 million to compensate for the shortfall. This would be a perfect hedge.

Although you could hedge your portfolio using the latest leveraged long and short instruments described in Chapter 10, which are new vehicles for investing in precious metals, options and futures are more commonly resorted to. There are numerous options and futures contracts you can use that will match both the period of time you want your portfolio hedged for and the characteristics you are looking for. But both

markets require some study to understand exactly what you are getting into. There are investment risks in the options and futures markets that go beyond what you will find in simple ETFs, stocks, and physical metals. If you are very interested in protecting against downside risk or want to explore various ways of enhancing returns using derivatives, I would recommend consulting with a financial adviser and/or reading further material about these markets.

A Few Final Thoughts Regarding the Gold Portfolio

I believe the fund management industry's views on gold are changing very rapidly and that the investment world has yet to make up its mind on the metal's proper place in a portfolio. The divergence of opinions on gold is striking. Commenting on gold in the summer of 2009, a very sharp and influential global strategist at one of the world's largest investment companies—one cited frequently in the financial press and on CNBC—told me that owning 1 percent in gold might make sense for a pension fund—but only sometimes. On the other side of the planet—in Asia, where I made a presentation about gold investment in the fall of 2009—views were extremely different.* Asking a panel of three precious metals strategists how much a pension fund should hold in gold, the lowest call was 10 percent. All four persons—one from the United States and three from Asia and Europe—made very good points to support their positions; the four have a very good understanding about gold and the present investment environment, and yet they reached extremely different conclusions.

Some readers may feel that gold should represent a *tactical* investment, a temporary position in a larger diversified personal portfolio (which can be significantly different from that of an institution with a much longer investment horizon) to be sold out of once a return objective has been reached, or following a change in the financial environment. These readers would be in line with the view most investment professionals have

^{*}The conference was the Gold Outlook Asia 2009 Conference held in Hong Kong in October 2009.

about gold, and they are influenced mostly by the poor performance gold had relative to other assets during the 1980s and 1990s—20 long years. Other investment professionals—a minority—believe that almost any diversified portfolio should hold at least a modicum of gold, which would make it a *strategic* asset to hold always as some percentage of the portfolio. I have never met an investment professional who believed that gold should represent a large investment in a portfolio, meaning a position above 10 percent, for the long term.

This book, as well as the one I wrote before, focuses on (1) the significant drivers I believe will impact the supply and demand for gold over the next few years, as well as (2) the financial challenges that are likely to influence performance of the assets that compete with gold—like stocks, bonds, and real estate—in the world's portfolios. Although there are reasons why a gold boom could endure for some time, I think a gold portfolio is something that I, personally, would not maintain as a permanent portfolio in my overall diversified portfolio of assets. I think of it as a portfolio to be maintained in these extraordinary times, but that years from now it will be best to think of precious metals ETFs, bars and coins, and equities as a smaller part of a diversified portfolio dominated by the traditional asset classes of choice, which are stocks and bonds.

In the following chapter, I focus on precious metals ETFs, one of the best ways to gain leverage to the price of gold.

Notes

- 1. Shayne McGuire Buy Gold Now (New York: John Wiley & Sons, 2008), 152.
- Dylan Grice, "Popular Delusions: What to Do When There's Nothing Left to Do?" Société Générale Report, March 31, 2010.

Chapter 10

Keeping It Simple with Precious Metals ETFs

In just a few years, ETFs have revolutionized the way the world invests in precious metals by connecting them to modern finance. John Hathaway, portfolio manager of the Tocqueville Gold Fund, believes the launch of the gold exchange-traded fund (ETF) was "the single most important development in the gold market since Nixon closed the gold window in 1971." By giving it a ticker, ETFs allowed gold to trade alongside stocks like Google, China Telecom, and Petrobras in the global arena, a major investment to be considered in portfolios. Gold, long seen as an investment that protects a portfolio from inflation, can now be used in a simple way by portfolio managers who are considering it alongside other inflation protection vehicles, like Treasury Inflation-Protected Securities (TIPS). It can also finally be used with simplicity

as a basic portfolio diversification vehicle, something that was extremely difficult to do just a decade ago. The China Investment Corporation, one of the largest investment funds of any kind in the world, made its first investment in a gold ETF in early 2010—just a few months prior to my writing these lines—and there are a great many funds that are buying gold for the first time. (See Table 10.1.) As I discussed in Chapter 6, gold—one of the oldest stores of value known to man—is quite new as an investment asset class, and in more ways than one.

Prior to the existence of ETFs, gold investment required more cost and effort: Investors were forced to own it physically (typically via coins or gold bars) and had to pay significantly higher prices—as much as 5 percent for a retail transaction—than could be obtained by, say, central banks. Alternative strategies using the futures market, which implies using leverage and frequent trading, were not accessible to or practical for most fund managers, especially for the thousands who manage long-only equity funds.

Today, aside from a recurring management fee of around 0.40 percent (for GLD, the most liquid gold ETF, and slightly less for some others), ETF investors pay essentially the same price as any central bank when buying gold. Another inconvenience was the need to store the gold, either at home (a risk) or by paying a storage fee to secure the asset in a safety deposit box at the bank. Perhaps most importantly, considering the effect the launching of ETFs has had on gold demand, ETFs have made gold investable to a great many funds that could not have legally owned it before. The pension fund I work for, Teacher Retirement System (TRS) of Texas, is not allowed to physically own any assets directly as all need to be held by way of a custodian. The creation of the GBI Gold Fund, which we launched in 2009, would not have been possible in its present structure without the existence of ETFs. As such, gold and other precious metals are truly new as investment assets to a great many of the world's largest funds.

The first gold ETF was launched by Gold Bullion Securities in Australia in 2003, but what has become the most important one is the SPDR Gold Trust (GLD), launched in November 2004. (See Figure 10.1.) Today, it holds roughly \$50 billion in gold, making it the most liquid precious metals ETF, although liquidity (the ease with which one can trade in and out of positions) would not be an important consideration

Table 10.1 List of ETFs Offering Diverse Types of Exposure to Precious Metals

Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
GLD	SPDR Gold Trust	NYSE Arca	47,898,490,000.0	Single long gold	11/18/2004
GLD SP	SPDR Gold Trust	Singapore	30,187,500,000.0	Single long gold	10/11/2006
$1326 \mathrm{JP}$	SPDR Gold Trust	Tokyo	4,140,591,000,000.0	Single long gold	6/30/2008
2840 HK	SPDR Gold Trust	Hong Kong	345,158,800,000.0	Single long gold	7/31/2008
GG9B GR	Gold Bullion	Frankfurt	3,737,367,000.0	Single long gold	4/15/2007
	Securities Ltd.				
GBS LN	Gold Bullion	London	4,740,590,000.0	Single long gold	3/31/2004
	Securities Ltd.				
GBS IM	Gold Bullion	BrsaItaliana	3,761,989,000.0	Single long gold	4/20/2007
	Securities Ltd.				
GBS FP	Gold Bullion	EN Paris	3,767,069,000.0	Single long gold	11/7/2005
	Securities Ltd.				
GOLD AU	ETFS Physical	ASX	624,712,200.0	Single long gold	9/17/2002
	Gold/Australia				
GLD SJ	NewGold Issuer Ltd.	Johannesburg	10,841,680,000.0	Single long gold	11/2/2004
DBP	PowerShares DB	NYSE Arca	254,461,700.0	Single long gold	1/5/2007
	Precious Metals				
	Fund				
DGL	PowerShares DB	NYSE Arca	149,567,800.0	Single long gold	1/5/2007
	Gold Fund				
IAU	iShares COMEX	NYSE Arca	3,239,721,000.0	Single long gold	1/28/2005
	Gold Trust				

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Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
CEF	Central Fund of Canada Ltd.	NYSE Amex	3,218,169,000.0	Single long gold	9/14/1983
CEF/A CN	Central Fund of	Toronto	3,275,674,000.0	Single long gold	11/15/1961
GTU	Central GoldTrust	NYSE Amex	550,813,100.0	Single long gold	8/26/2003
GTU-U	Central GoldTrust	Toronto	560,530,200.0	Single long gold	7/7/2003
PHYS	Sprott Physical Gold Trust	NYSE Arca	531,885,000.0	Single long gold	2/26/2010
PHY/U CN	Sprott Physical Gold Trust	Toronto	531,884,900.0	Single long gold	2/26/2010
Silver					
DBS	PowerShares DB Silver Fund	NYSE Arca	69,073,380.0	Single long silver	1/5/2007
SLV	iShares Silver Trust	NYSE Arca	5,724,536,000.0	Single long silver	4/28/2006
PHAG LN	ETFS Physical Silver	London	473,188,400.0	Single long silver	4/24/2007
PHAG IM	ETFS Physical Silver	Brsaltaliana	375,398,100.0	Single long silver	6/20/2007
PHAG NA	ETFS Physical Silver	EN Amsterdam	375,640,600.0	Single long silver	5/18/2007
SLVR LN	ETFS Silver	London	57,765,870.0	Single long silver	9/27/2006
NSV	E-TRACS UBS	NYSE Arca	4,494,400.0	Single long silver	4/1/2008
	Bloomberg CMCI Silver ETN				

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Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
Platinum Grou	roup Metals (PGMs)				
PTM	E-TRACS UBS Long Platinum ETN	NYSE Arca	91,196,250.0	Single long platinum	5/9/2008
PGM	iPath Dow Jones-UBS Platinum Subindex Total	NYSE Arca	118,897,500.0	Single long platinum	6/24/2008
PHPT LN	ETFS Physical Platinum	London	647,610,500.0	Single long platinum	4/24/2007
PHPT IM	ETFS Physical Platinum	BrsaItaliana	512,215,100.0	Single long platinum	6/20/2007
PHPT NA	ETFS Physical Platinum	EN Amsterdam	511,875,400.0	Single long platinum	5/10/2007
PHPD LN	ETFS Physical Palladium	London	281,258,600.0	Single long palladium	4/24/2007
PHPD IM	ETFS Physical Palladium	BrsaItaliana	222,572,000.0	Single long palladium	6/20/2007
PHPD NA	ETFS Physical Palladium	EN Amsterdam	223,716,600.0	Single long palladium	5/10/2007
PPLT PALL	ETFS Platinum Trust ETFS Palladium Trust	NYSE Arca NYSE Arca	580,514,800.0 384,465,000.0	Single long platinum Single long palladium	1/8/2010 1/8/2010

Comman	Ticker
(Continued)	Table 10.1

Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
Equity Longs (ETFs)	gs (ETFs)				
GDX	Market Vectors Gold Miners ETF	NYSE Arca	7,427,825,000.0	Equities—senior and intermediate	5/22/2006
GDXJ	Market Vectors Junior Gold Miners ETF	NYSE Arca	1,229,562,000.0	Equities—junior and emerging producers	11/11/2009
PSAU	PowerShares Global Gold and Precious Metals Portfolio	NASDAQ GM	44,131,500.0	Equities—global precious metals	9/18/2008
PLTM	First Trust ISE Global Platinum Index Fund	NASDAQ GM	7,518,435.0	Equities—platinum and palladium	3/12/2010
Leveraged Longs	Longs				
DGP	PowerShares DB Gold Double Long ETN	NYSE Arca	475,776,000.0	Double the performance of gold	2/28/2008
NGL	ProShares Ultra Gold	NYSE Arca	201,608,500.0	Double the performance of gold	12/3/2008
HBU CN	Horizons BetaPro COMEX Gold Bullion Bull Plus ETF	Toronto	67,072,650.0	Double the performance of gold	1/23/2008

(Continued)	
Table 10.1	

Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
AGQ	ProShares Ultra Silver	NYSE Arca	205,144,000.0	Double the performance of silver	12/3/2008
TSIT TN	ETFS Leveraged Silver	London	55,512,240.0	Double the performance of silver	3/11/2008
LPLA LN	ETFS Leveraged Platinum	London	29,335,960.0	Double the performance of platinum	3/11/2008
Leveraged Shorts	shorts				
DZZ	PowerShares DB Gold Double Short ETN	NYSE Arca	60,928,000.0	Twice the inverse performance of gold	2/28/2008
GLL	ProShares UltraShort Gold	NYSE Arca	46,679,820.0	Twice the inverse performance of gold	12/3/2008
HBD CN	Horizons BetaPro COMEX Gold Bullion Bear Plus ETF	Toronto	3,271,500.0	Twice the inverse performance of gold	1/23/2008
ZSL	ProShares UltraShort Silver	NYSE Arca	41,825,800.0	Twice the inverse performance of silver	12/3/2008
SSIL LN	ETFS Short Silver	London	4,615,338.0	Single short on silver	2/22/2008 (Continued)

 Table 10.1 (Continued)

Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
PTD	E-TRACS UBS Short Platinum	NYSE Arca	4,809,600.0	Single short on platinum	5/9/2008
SPLA LN	ETFS Short Platinum	London	1,734,138.0	Single short on platinum	3/11/2008
Swiss Offerings	(Zürcher Kantonalbank, ZKB, is wholly owned by the canton of Zurich.)	ZKB, is wholly ov	wned by the canton of Z	Surich.)	
ZGLD SW	ZKB Gold ETF	SIX Swiss Ex	5,090,081,000.0	Single long gold	3/15/2006
ZSIL SW	ZKB Silver ETF	SIX Swiss Ex	1,099,657,000.0	Single long silver	5/10/2007
ZGLDUS SW	ZKB Gold ETF-A USD	SIX Swiss Ex	886,890,300.0	Single long gold	1/15/2009
ZGLDEU SW	ZKB Gold ETF-A EUR	SIX Swiss Ex	534,142,700.0	Single long gold	12/9/2008
ZPLA SW	ZKB Platinum ETF	SIX Swiss Ex	524,944,000.0	Single long platinum	5/10/2007
ZPAL SW	ZKB Palladium ETF	SIX Swiss Ex	280,476,000.0	Single long palladium	5/10/2007
ZSILEU SW	ZKB Silver ETF EUR	SIX Swiss Ex	159,991,500.0	Single long silver	12/9/2008
ZSITOS SW	ZKB Silver ETF USD	SIX Swiss Ex	140,246,100.0	Single long gold	12/9/2008
Corner, Bloombone					

Source: Bloomberg.

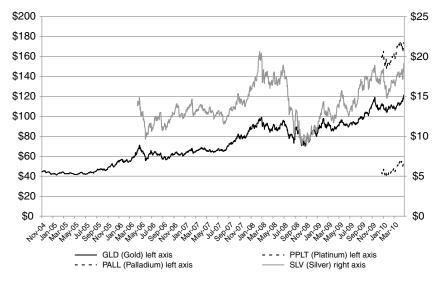


Figure 10.1 Price Chart at ETF Inception Date

Source: Bloomberg.

for most investors. Another option is the ETFS Gold Trust (SGOL), which in addition to having a slightly lower management fee has its bullion stored in Switzerland as opposed to London, which is the case with GLD. Gold ETFs were quickly followed by silver, and ETFs for platinum and palladium were launched shortly after. Today one can invest in gold ETFs on most major exchanges of the world, from Mexico to Singapore. Although the strong performance of platinum and palladium during 2009 is partly attributable to economic recovery and climbing demand for autos, the metals' rise is probably also linked to the anticipated launching of new ETFs for the metals, which gave investors a viable vehicle for investing in them. It would be difficult to determine with precision how much of the rise in precious metals' prices in recent years can be attributed to the presence of ETFs, but no doubt the effect has been significant.

Considering that precious metals ETFs are liquid (easy to buy and sell) and provide the investor with a *representative* amount of a given metal by investing in one, they can be used to set up an ETF-only portfolio driven entirely by metals. Such a portfolio would be a simplified version of the hypothetical portfolio set up in Chapter 9, which included

exposure not only to precious metals ETFs, but to physical metals and stocks. In this metals ETFs-only portfolio, you would only need to decide (1) what portion of your overall assets you want to hold in precious metals and (2) the degree of diversification among the metals.

Gold, silver, platinum, and palladium each have their own drivers, and perhaps the most significant cause of performance variance among them is the state of the economy: During a recession or economic slowdown, gold becomes the defensive metal while silver, platinum, and palladium tend to show weaker performance, as was the case in 2008. Furthermore, platinum and palladium are highly dependent on discretionary consumer spending, as most of demand for these PGMs comes from the auto industry (as discussed in Chapter 8). Silver has more diverse industrial uses than gold, which makes it less economically sensitive. That being said, silver is seen by many as a monetary metal and I personally expect it to begin following gold even more closely in the future, which might not be the case for the PGMs. Figures 10.2 to 10.4 show a few potential distributions that you might consider based on your expectations.

It's never quite this simple, but in general, if you have a bullish outlook on the economy, own more silver, platinum, and palladium. As seen during much of the 2009 recovery and during the first months of

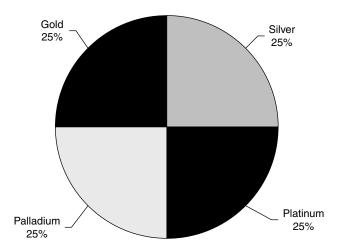


Figure 10.2 ETF Allocation 1: Equal Metals

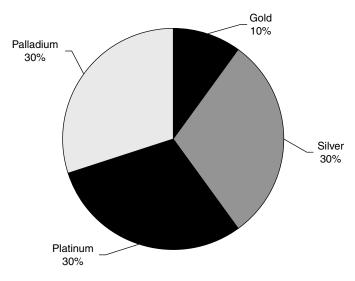


Figure 10.3 ETF Allocation 2: Economic Bull

2010, platinum, palladium, and silver outperformed gold significantly. Being more economically sensitive, their demand and prices have risen according to script. And if the economic recovery continues and broadens, it makes sense to think that the performance divergence from gold should continue. In addition to the larger industrial demand that comes with economic expansion, platinum, palladium, and silver also benefit

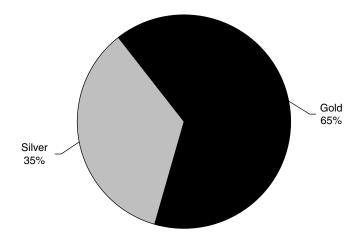


Figure 10.4 ETF Allocation 3: Monetary Metals Only

from having substantially smaller markets. Although the gold market is very small relative to other financial markets, like equities and bonds, it is substantially larger than that of the other main precious metals. Hence, as demand for the other metals rises, there is less supply available to meet it and prices tend to rise more rapidly.

To adopt a *bearish* positioning might not be as clear-cut as you'd think. Broadly speaking, the higher the percentage of gold in a precious metals portfolio, the more protection this will provide in an economic downswing. At least, that is what the 2008 financial episode would lead us to believe. This is due to the fact that most of the demand for platinum and palladium, as well as silver (though to a lesser extent), comes from industrial users, who would buy less should the economy weaken. And investment flows would concentrate in gold, as occurred in 2008.

That being said, I believe there is a chance that another recession—should it arrive suddenly in late 2010 or 2011—might be very different from other recessions we've experienced in recent decades. I think there is a significant chance, due to the massive fiscal deficits afflicting major economies and yet the need for continued government spending, that we could face a sudden increase in inflation, perhaps provoked by a bond market problem (as discussed in Chapters 1 and 2). If this were the case, and we were to enter uncharted waters in modern economic policy through even deeper monetary stimulus (read: moneyprinting) than we have already been through, then there is the chance that investment in precious metals could take a different course. If investors began to anticipate a significant rise in inflation, then it makes sense to expect that significant investment flows would move into traditionally nondefensive precious metals—platinum, palladium, and silver—and that these could outperform gold. Even though short-term industrial demand for the PGMs could be weak, large investment could flow into the metals in anticipation of future inflation. Since metals are storable, unlike perishable agricultural commodities, perhaps they could surprise us on the upside even in a severe recession.

I realize that the implication from the preceding comments is that platinum, palladium, and silver might be able to outperform gold in either economic environment. That gold should underperform the other three metals during an economic contraction would be abnormal, and

as such, it is unlikely. But the financial world has changed substantially in recent years, and the sudden deterioration in federal balance sheets of major economies has given rise to concern about the value and safety of currencies like the yen, the British pound, the euro—and, of course, the dollar. The arrival of precious metals ETFs, which allow funds and individual investors to trade metals just as they do currencies, has coincided with the growing understanding that the metals can be considered currencies, as well. Given the high correlation that silver, platinum, and palladium have with gold and—perhaps most importantly—the very, very small size of those metallic markets, it is possible that in time investment demand will be as significant as industrial demand is today. And if that were to occur, silver, platinum, and palladium would soar higher than gold in a precious metals bull market.

A Different Animal: Return Magnification Vehicles

In recent years, several new investment vehicles have been launched that offer the potential to amplify the gains from potential appreciation—and depreciation—of precious metals. Unlike futures contracts on precious metals and options on mining stocks, which can serve the same purpose, these vehicles don't have an expiration date. This is a tremendous advantage because one of the most difficult investment hurdles is getting the timing of an investment idea right.

If you had felt bullish about gold in 2008 and wanted to leverage your exposure, you could have bought a call option on a gold stock. But you would have lost your entire investment: Gold stocks had a bad dip in that year and your option would have expired worthless. And you would have watched gold stocks take off in 2009 without an appreciating call option. But if you had bought ProShares Ultra Gold, which is designed to roughly double gold's price appreciation, you would have incurred paper losses in 2008, but could have held on to the shares without a loss. (See Table 10.2.) The benefit would have eventually arrived in 2009, when gold reached new highs and gold stocks surged. And you could still own the Ultra Gold shares in your portfolio today. Feeling bullish about silver or platinum, you could have also gained leverage by buying ETFS Leveraged Silver or its Leveraged Platinum, which also aim to

1aple	Table 10.2 ETF	ETF Magnification Vehicles	es			
Ticker		Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
Lever	Leveraged Longs	Longs				
DGP		PowerShares DB Gold Double Long ETN	NYSE Arca	475,776,000.0	Double the performance of gold	2/28/2008
NGL		ProShares Ultra Gold	NYSE Arca	201,608,500.0	Double the performance of gold	12/3/2008
HBU CN	CN	Horizons BetaPro COMEX Gold Bullion Bull Plus ETF	Toronto	67,072,650.0	Double the performance of gold	1/23/2008
AGQ		ProShares Ultra Silver	NYSE Arca	205,144,000.0	Double the performance of silver	12/3/2008
TSIL LN	Z	ETFS Leveraged Silver	London	55,512,240.0	Double the performance of silver	3/11/2008
LPLA LN	Z	ETFS Leveraged Platinum	London	29,335,960.0	Double the performance of platinum	3/11/2008

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Ticker	Company Name	Exchange	Market Cap (Local)	Purpose	Inception Date
Leveraged Shorts	Shorts				
DZZ	PowerShares DB Gold Double Short ETN	NYSE Arca	60,928,000.0	Twice the inverse performance of gold	2/28/2008
CLL	ProShares UltraShort Gold	NYSE Arca	46,679,820.0	Twice the inverse performance of	12/3/2008
HBD CN	Horizons BetaPro COMEX Gold Bullion Bear Plus ETF	Toronto	3,271,500.0	Twice the inverse performance of gold	1/23/2008
ZSL	ProShares UltraShort Silver	NYSE Arca	41,825,800.0	Twice the inverse performance of silver	12/3/2008
SSIL LN PTD	ETFS Short Silver E-TRACS UBS Short Platinum	London NYSE Arca	4,615,338.0 4,809,600.0	Single short on silver Single short on platinum	2/22/2008 5/9/2008
SPLA LN	ETN ETFS Short Platinum	London	1,734,138.0	Single short on platinum	3/11/2008

Source: Bloomberg.

double the performance of those metals. Inversely confident, you could buy some shares of similar shorting vehicles, or the Horizons BetaPro COMEX Gold Bullion Bear Plus ETF, whose objective is the provide *twice* the inverse performance of gold.

In 2009, owning shares of ETFS Leveraged Platinum (see Figure 10.5), or owning PowerShares Double-Short Gold during the months when gold was weak in 2008 (see Figure 10.6), could have made you a pretty penny.

But there are some important considerations for these investments. First, to obtain the return magnification, portfolio managers of these funds need to resort to the derivatives and futures market to gain the leverage needed. And since managers are forced to face the reality of contract expiration, things can move in unexpected directions and harm the fund managers' portfolios, a fact that is likely clearly indicated in the prospectuses that virtually no investor reads. Despite the potential risks that come with the use of derivatives, some precious metals investors are buying these investment vehicles to move away from financial markets, to some extent. And yet precious metals magnification investments like these can do the opposite. There is nothing wrong with using derivatives, and these instruments offer a fantastic way to leverage precious metals'



Figure 10.5 Performance of ETFS Leveraged Platinum (LPLA LN), 2009 Source: Bloomberg.

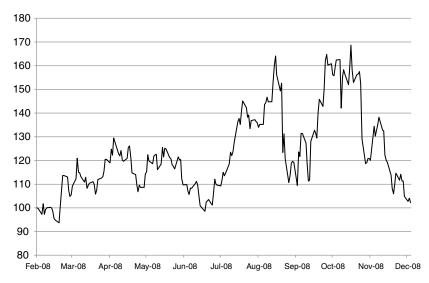


Figure 10.6 Performance of PowerShares Double–Short Gold (DZZ), 2008 Source: Bloomberg.

performance without the time limitations presented by other vehicles, like futures and options. However, investors in these instruments need to understand that they are not actually buying precious metals, themselves, which sets these vehicles apart from ETFs, like GLD, which at least *represent* ownership positions in actual metal held in a vault. Another important consideration is that the liquidity of these investment vehicles is not particularly high, something that might not be a consideration for some individual investors, but it might be for others. Finally, these new investment vehicles have yet to be tested under several periods of severe market stress.

Note

John Hathaway, "A Contrarian's Dilemma," letter written to investors, December 2009.

Chapter 11

Precious Metals Stocks: The Cornerstone of a Gold Portfolio

basic way to outperform the price of gold in a bull market is to invest in equities related with gold. (The rare coins market has outperformed gold over the long term, but it is not a market for everyone. You can read about it in Chapter 15.) Precious metals stocks—all of which are highly correlated with gold, even those mainly producing silver, platinum, or palladium—provide leverage to the price of gold, which is to say their earnings can rise faster in percentage terms than the price of gold—and higher earnings are the primary driver of higher stock prices.

Of course, aiming high has its risks, and buying mining stocks—one of the most volatile corners of the stock market—exposes an investor to the reality that underperforming gold when the metal's price falls is also a possibility: Leverage works in reverse, as well. That being said, if you believe we remain in a gold bull market, as I do, then it's hard to escape the conclusion that mining stocks today offer a significant opportunity to ride the gold market higher.

Perhaps the strongest evidence one could offer to show that gold is not in an investment bubble—other than the fact that the metal remains deeply underowned compared to history—is that gold stocks have underperformed gold substantially for several years. If there were a generalized sense among investors that gold is in the early stages or middle of a boom—a view that not a single major Wall Street analyst holds today—then a great many of them would be buying precious metals stocks, which historically have provided two to three times leverage to gold price movements. Hence, in recent years with a rising gold price one might have thought that most mining stocks would have outperformed the price of gold, which these stocks have not been doing, as you can see in Figure 11.1.

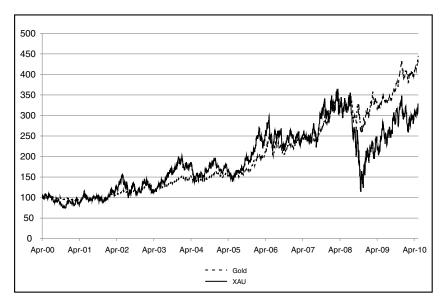


Figure 11.1 Price Performance of XAU Gold Stock Index versus Physical Gold Source: Bloomberg.

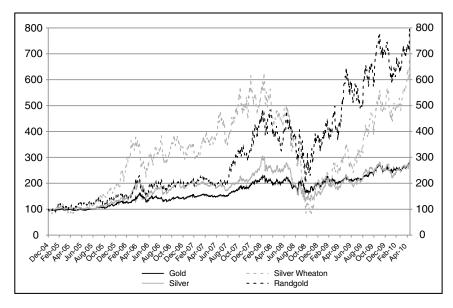


Figure 11.2 Price Performance of Key Gold and Silver Stocks (Indexed to 100) Source: Bloomberg.

Although most precious metals equities have underperformed the price of gold, there are a few exceptional stocks that have moved much faster and higher than precious metals, as you can see in Figure 11.2.

This chapter was written mainly for nonprofessional investors who might be considering precious metals—related stocks for the first time. As such, the focus is entirely on what I suggest a new investor should concentrate on as a newcomer to this investment space, for which there is little guidance at the bookstore.* The reason there are not more books on mining—and precious metals mining, in particular—is that the industry is quite small in the equity investment universe. Consider that of the MSCI All Country World Index, the standard global equity index of thousands of stocks, only 1 percent of the index's value is in precious

^{*}For those wanting to read further, three notable books by mining experts are Pierre Lassonde's *The Gold Book* (Markham, ON: Penguin, 1990), a classic that is unfortunately out of print; *The Goldwatcher* (New York: John Wiley & Sons, 2008) by John Katz and Frank Holmes; and Michael Coulson's *An Insider's Guide to the Mining Sector* (Hampshire, UK: Harriman House, 2004).

metals stocks. Compare this to the banking industry, which despite its collapse in 2008 and partial recovery, still represents well over 10 percent of the index. I'm not suggesting that gold mining stocks could someday be that large an industry in the index; I'm merely making the point that the industry is very small, which is why most fund managers don't pay much attention to it. There are a small number of stocks (fewer than 30) with a market capitalization exceeding \$1 billion, and all the world's precious metals miners put together are worth less than the Exxon corporation, a single stock.

But the lack of interest is not only due to the industry's small space. After all, precious metals stocks have outperformed those of a great many other industries by a wide margin in the past decade. I think the disdain has a lot more to do with the fact that gold performed so poorly during the 1980s and 1990s, when many of today's financial professionals were investing elsewhere (and mocking gold bugs—with good reason—over those 20 years). Despite rising gold prices in recent years, I think there is still this lingering sense that gold is about to become a losing investment again—and 2010 began with a number of warnings that the gold boom was over—which explains the continuing lack of widespread interest in precious metals and mining stocks up to now. I see it at my pension fund and in the multiple conversations I have with people in the industry. But I remain convinced this is about to change as a result of the drivers discussed in this book.

One initial thought is that one should maintain a healthy degree of skepticism when approaching gold mining stocks, because something a beginning precious metals mining investor faces when examining the investment landscape is the abundance of promise. There is a sense that gold is being discovered or is about to be discovered everywhere, that new resources and reserves are on the verge of being announced by a great many mining companies, and all despite the fact that global mining production has been declining, unable to regain the peak it reached in 2001, when a little over 2,600 tons of gold were produced.

A study produced in the early 1990s by Cominco, a mining company, found that out of over 2,000 projects on which it had spent at least \$1 million each, the company had only made six or seven mines.* So

^{*}I would like to thank Dr. Richard Appel for providing this statistic.

less than half of one percent of promising projects (after all, at least a million dollars was spent on each one) actually proved to be successful! Considering that it takes years to determine, once gold has been found at a given location, if extracting the metal profitably is possible, there are opportunities for dishonesty and financial fraud that investors always need to be alert to, especially if we are going into a gold boom. Gold has a way of attracting swindlers who prey on investors' ever-present desire for fast profits, and even the smartest mining analysts and investors have been deceived; I wrote about an example of this in my previous book:

That the history of gold mining is replete with stories of deception is evident in Mark Twain's cynical observation that "A gold mine is a hole in the ground with a liar on top." Twain would have laughed at the story of Bre-X, a corporate scandal that rocked the gold mining world in the 1990s. For the sake of brevity, let me give you the highlights of this cautionary tale. Bre-X began as an obscure Calgary gold exploration company with no revenues or earnings. Its executives, having searched for gold unsuccessfully in the far-off jungles of Kalimantan, Indonesia, decided to say that they had actually found rich deposits. In time, providing false earth samples that gullible analysts trusted, Bre-X went from estimating deposits of three million ounces of gold to 200 million, which at the time amounted to 70 billion dollars for an asset the company didn't even have a clear title to. Wall Street ate this up-salivating for each of the many lies Bre-X management continually fed it—and a great many analysts promoted the stock relentlessly, some saying they "had seen the gold" with their own eyes. In what we might call its Microsoft phase, Bre-X went from trading at pennies per share to a peak of \$286.50 in 1996 to reach a stunning market capitalization of \$6 billion. Its Enron phase—during which a Bre-X executive en route to explain why there was no gold dove to his death from a helicopter—ended with the stock recording a final trade at 7 cents a share.²

Fortunately, there are multiple gold stocks listed on world markets that can promise and deliver. And notwithstanding the low-odds

possibility of picking the next Bre-X bomb, there is also the low-odds potential for picking the next jackpot stock, like Barrick, which rocketed from a tiny company in 1987 to become the biggest gold company in the world, producing a stunning 7 million ounces of gold per year in 2009. Its market cap today is \$40 billion, a remarkable achievement for a company that started up just 27 years ago with a couple of million dollars. But the Barrick of 1983 is substantially different from the Barrick of today: Its risk/reward trade-off has completely inverted now that it has a globally diversified production base driven by a proven management team respected throughout the industry. It would be impossible to derive the same return on Barrick today that you would have by buying the stock in 1983, when you would have been taking a tremendous risk. So the gold stocks' investment challenge is to find the proper balance between risk and reward, a trade-off that is represented in the key fundamental drivers of precious metals stocks shown in Figure 11.3.

Intuitively, each of these factors make sense and they all point to the potential for increasing earnings, the prime determinant of a given's stock's appreciation in any industry, from mining to dental implants. For example, investing in a mining company that has access to abundant

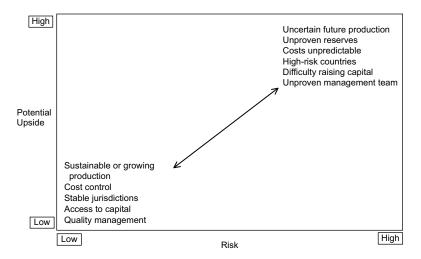


Figure 11.3 Risk/Reward Trade-Off for Gold Stocks

capital for exploration is less risky than buying a stock that doesn't, and the former likely trades at a premium (offers potentially less upside) than the latter, all other factors being equal. But it will be useful to consider a few of the points separately, as all are major considerations when approaching mining stocks. All of them are reflected in the valuation that we consider a few pages ahead.

Sustainable or growing production. Mines are depleting assets with a finite life. Some can be productive for many decades and new veins can be discovered, but any given mine has a finite number of ounces that can be extracted profitably at current market prices. (However, a rising gold price can make mines with declining grades profitable to operate again, and many sites abandoned many years ago are being reopened.) As such, for a producing company to maintain or grow beyond a given production level—like the 2.5 million ounces that Goldcorp is expected to produce in 2010*—it will always need the reserves to be mined next, much like a supermarket needs to be continually stocked to continue operating. Table 11.1 shows the world's largest operating gold mines.

However, Goldcorp differs from Safeway, the supermarket operator, in that the miner's goods are nonperishable and rapidly rising inventories (reserves) is a good thing—actually, a great thing!—which would not be the case for Safeway. (Reserves, a precious metals miner's inventory, are not to be confused with resources that have not been proven to be economically viable. See the definitions that follow.) To replace the reserves that are being depleted by production, a mining company will need to incur costs to make further exploration at existing sites, find new reserves on its own land, or acquire other properties or existing mining companies. (The never-ending search for new reserves is the main driver of mergers and acquisitions activity in the mining sector.) There are companies, like Yamana, which are more active—or more specifically, have been more successful than others in seeking to add new reserves and future production, and trade at a premium as a result. But not all reserves are the same, as the following terms explain.

^{*}These are estimated "gold equivalent" ounces that includes the benefit of revenues derived from by-product minerals, like silver, that typically result from the same gold mining activity.

Table 11.1 Ten Largest Gold Mines

Top 10 Gold Mines (based on estimated 2010 production)

Rank	Mine (Location)	Company	Production 2010 (Thousand Ounces)
1	Nevada Operations (Nevada, United States)	Newmont	1,695.3
2	Cortez (Nevada, United States)	Barrick	1,107.5
3	Goldstrike (Nevada, United States)	Barrick	1,104.0
4	Veladero (Argentina)	Barrick	1,092.0
5	Lagunas Norte (Peru)	Barrick	855.0
6	Driefontein (South Africa)	Gold Fields	830.2
7	Olimpiada (Russia)	Polyus	826.2
8	Boddington (Western Australia)	Newmont	815.0
9	Yanacocha (Peru)	Newmont	810.3
10	Lihir Island (Papua New Guinea)	Lihir	804.0

Source: BMO Capital Markets.

Definitions³

- Proven Mineral Reserve—is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
- Probable Mineral Reserve—is the economically mineable part of an indicated and, in some circumstances, a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
- Measured Mineral Resource—is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with

confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

- Indicated Mineral Resource—is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- Inferred Mineral Resource—is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Hedging. Given any mining company's significant dependence on metal prices to determine its level of revenues—which affects its profitability and ultimately the wealth of its shareholders—during periods of metal price weakness, such as the 1990s, a great many miners protected themselves using hedging mechanisms. Essentially, hedging means selling forward production (typically to a bullion bank) at prices often near today's to insure revenues against a potential future decline in metal prices. The problem with hedging, as a great many companies proved during the 2000s, is that it also limits revenue upside since part of future production will have been sold at a (potentially lower) set price. Hedging made sense and worked during the 1990s, when the price of gold fell all the way below \$300 an ounce, but with rising prices, investors have sought

completely unhedged companies that offer greater leverage to higher prices. As a result, most miners today have limited or no hedges, although this could change in the future, so it's something to keep in the back of your mind as an investor.

Cost control. Cost control is evidently a key determinant of profits, as companies with a low cost of production are able to obtain the highest profits from each ounce of gold produced. Companies that experience significant volatility in per-ounce cost of production often trade at a discount as investors worry about management discipline or they are concerned that unforeseen production difficulties are arising. Some South African miners have faced significant challenges in recent years due to energy costs—a major detractor from mining stock profits during the 2000s—and interruptions. This becomes vital for mining companies extracting low-grade ore—from which less gold can be extracted and hence lower revenues—which is increasingly the case today: Decades ago there were many mines that produced 30 grams of gold per ton of ore extracted. Today, there are profitable two-gram-per-ton mines in operation, but evidently they are only profitable because of the lower relative cost base needed to obtain each refined ounce of gold.

Ironically, the greatest leverage to rising gold prices can be found in companies with higher costs. Table 11.2 shows a simple example of

Table	11.	2 Ex	amble	of	O.	perational	Leverage

		Comp	an	y X	Comp	an	y Y
		Period 1		Period 2	Period 1		Period 2
Gold sales (ounces)		100,000		100,000	100,000		100,000
Price	\$	1,000	\$	1,500	\$ 1,000	\$	1,500
Revenue	\$1	00,000,000	\$	150,000,000	\$ 100,000,000	\$	150,000,000
Cash costs per ounce	\$	900	\$	900	\$ 500	\$	500
Cost base	\$	90,000,000	\$	90,000,000	\$ 50,000,000	\$	50,000,000
Profit	\$	10,000,000	\$	60,000,000	\$ 50,000,000	\$	100,000,000
			C	Company X		C	Company Y
Percent Change in Profit				500.0%			100.0%

how this is the case: Despite having a higher cost base (\$900/ounce), Company X enjoys higher profit growth than Company Y (which has a lower cost base of \$500/ounce) when gold prices rise: it has higher operating leverage.

That being said, if gold prices decline, company X will see a far more severe profit decline than the company with a lower cost of production. In fact, it has a higher potential of actually having to *shut down* operations if prices fell below \$900/ounce. The important thing to keep in mind is that a company with a high per-ounce cost of production will have higher earnings volatility.

Stable jurisdictions. Mining companies in a productive stage cannot leave the site they are mining at, and if they happen to be operating in a region where laws can be changed easily, this can become a major concern. There are countless instances of governments demanding higher royalty payments and/or different working conditions for workers. It is well known that mining is perceived as a dirty, nasty, dangerous business that can be detrimental to the natural environment, and some governments will change standards as they see fit. Hence, mining companies that operate in countries where political stability is questionable trade at a discount to those with mines in stable jurisdictions, which include countries like Canada, the United States, Australia, and several Latin American nations, among others that have a relatively benign and predictable regulatory and tax environment. One important fact to consider regarding jurisdictions is that, as a result of the recent recession and need for employment opportunities, governments anxious for job creation have been more open to consider new mining ventures than they were a few years ago.

Quality of management. This may seem obvious, but having sharp management is more important in the mining industry than it is for many other types of companies. Consider that most of mining activity occurs away from the eyes of investors, unlike what is the case with, say, a media company: Any investor can turn on a television and get a sense of how good the programming is on a given channel. But compare this to a new mining company, which, despite the increasing costs and expenses—negative cash flow—being incurred to build a new mine, will not be producing any gold until several years in the future. Once again, keep in mind that mining is a complex and dangerous business. Miners

use explosives extensively, are often exposed to harsh temperatures and environments in which it can be difficult to breathe properly, and most of them work for hours in the dark. A great many of them are injured each year, and dozens die each year, which makes management that can provide for safety and proper operating standards vital. There have been significant instances of management corruption, and problems can be hidden for years.

Hence, trust that management is taking the proper and necessary steps to develop a mine on time and under the conditions it set at the outset is something that takes a great deal of time to prove. Companies that trade at rich valuations, as we will see, tend to do so in part because their managements have garnered the trust of the investment community, who believes that a given miner will meet its cost and production targets and will often provide positive surprises in terms of new deposit discoveries and the continual expansion of reserves.

Valuation

Obviously, a company with rapidly growing gold production and fantastic cost control, operating multiple mines distributed among stable jurisdictions like Canada and Australia under impeccable management, sounds great. But that doesn't mean its stock will be a great investment. Few would deny that Microsoft is an amazing story, which grew from an idea into one of the largest companies in the world, but its stock price has been stuck between \$20 and \$30 a share for the last decade. As I write in early 2010, one of the darlings of the precious metals investment world is Agnico-Eagle (AEM) because all of the boxes check off. I've walked inside its impressive Canadian mines (and it also operates mines in Mexico and Finland), have examined its growth profile and cost controls, met with its strong management team, and speculated on the potential growth its future might hold. Every gold fund manager anywhere on the planet knows about the stock and a great many own it. Agnico has earned its strong reputation and has been rewarded with a very high stock price: it is almost ten times higher than it was a decade ago. The stock trades at a premium to the gold mining sector on most valuation metrics. Let's take a look at its valuation compared with the precious metals mining industry.

Table 11.3, based on estimates provided by BMO Capital Markets, divides the industry into senior, intermediate, and emerging companies based on their level of production. Seniors produce at least a million ounces of gold per year, intermediates typically between 200,000 and a million ounces, and emerging producers are usually just beginning or about to produce their first ounces of gold. There is another category altogether commonly regarded as junior stocks, which focus on the vital mining stage of exploration, an exciting investment arena that can produce stocks that either surge like Apple Computer or fall to zero. There are hundreds of juniors listed on exchanges around the world, mostly in Canada and Australia, and some of them will eventually become spectacular winners. Just keep in mind that juniors are invariably stuck at a money-absorbing stage, as they require investment capital to acquire properties and carry out exploration. Virtually all of them will never move on to the final stage of developing a project that ultimately produces refined gold; successful explorers often define success as selling a promising asset to a precious metals miner that can fully take advantage of a given deposit's potential. To closely examine the potential of junior stocks requires a level of detail beyond the scope of this book, as well as an ability and desire to take on investment volatility to an even higher level than producing mining stocks already have. In the risk/reward chart in Figure 11.3, junior stocks are way into the top right-hand corner!

As you can see in Table 11.3, Agnico has a market cap per reserve ounce of \$628 and it trades at a significant premium to the gold mining sector in terms of price-to-net present value (P/NPV). There are a great many more valuation metrics that mining analysts and portfolio managers use, but this one can offer a snapshot of the company's short-term and long-term valuation based on analyst estimates: The P/NPV compares the current share price with the present value of all net future cash flows derived from the entire life of all its mining operations (typically using a discount rate of 10 percent). In layman's terms, NPV tries to place a value on all the ounces a company will ever produce at its mines based on what we know today. Obviously, unlike estimated earnings, which are unlikely to vary substantially over the short term (absent some major event), NPV can change dramatically based on changes in things like reserves, cost estimates, and projected gold prices. Net present value is the hardest thing to estimate, and yet its importance is made evident

Table 11.3 Valuation Table Gold Companies

c (Thousand ounces) Probable ouncable ounces) Total ouncable ounces) Total ouncable			Price 1	Price to NPV BMO	NAV Premiu (Discount)	NAV Premium (Discount)	Gold Equivalent Production 2011E	Adjusted Capital Per Rec Ounce	Adjusted Market Capitalization Per Recoverable Ounce (US\$)	Price to Earnings (x) Dividend Net Debt	Dividend	Net Debt
1.68x 3.20x (2.9%) 96.6% 1,510 \$628 23.4x 0.3% 1.13x 2.69x (47.9%) 16.6% 4,911 \$305 18.0x 0.4% 1.02x 2.22x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.02x 2.52x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.02x 2.52x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.02x 2.65x (41.9%) 43.9% 2,266 \$411 24.1x 0.5% 0.93x 2.29x (46.6%) 43.0% 1,969 \$4484 17.6x 0.5% 0.82x 2.29x (46.6%) 43.0% 1,969 \$4484 17.6x 0.4% 0.82x 2.15x (42.2%) 35.5% 5,529 \$455 12.7x 0.4% 0.95x 1.15x (42.2%) 35.5% 1,479 \$777 14.3x 0.3%	Company	Ticker	Assur 0%	mption 10%	US\$1,2	230/oz 10%	(Thousand Ounces)	Proven& Probable	Total Allowable	BMO Assumption 2011E	Yield 2009E	to Equity %
1.68x 3.20x (2.9%) 96.6% 1,510 \$628 23.4x 0.3% 1.13x 2.69x (47.9%) 16.6% 4,911 \$305 18.0x 0.4% 1.02x 2.72x (38.9%) 56.1% 7,715 \$406 15.0x 0.9% 1.02x 2.22x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.02x 2.52x (31.0%) 74.% 3.803 \$274 11.8x 0.9% 1.10x 2.66x 4.4% 3.803 \$274 11.8x 0.9% 0.93x 2.30x (41.9%) 4.4% 3.803 \$245 11.8x 0.5% 0.93x 2.30x (41.9%) 4.30% 1,781 \$441 2.41 0.4% 0.85x 2.22x (44.6%) 1.772 \$1.479 \$3.48 17.1x 0.4% 0.55x 2.14x (75.1%) (23.2%) 1.479 \$3.48 17.1x 0.6% 0.51x	Senior Producers											
1.13x 2.69x 4,911 \$305 18.0x 0.4% 1.02x 2.72x (38.9%) 56.1% 7,715 \$406 15.0x 0.9% 1.02x 2.72x (38.9%) 56.1% 7,715 \$800 \$655 22.8x 0.9% 1.02x 2.52x (31.0%) 78.0% 2,800 \$655 22.8x 0.9% 1.10x 2.66x (51.0%) 4.4% 3.803 \$274 11.8x 0.9% 1.14x 2.66x (41.9%) 4.4% 3.803 \$411 24.1x 0.5% 0.93x 2.30x (41.9%) 4.3 9% 2.266 \$411 24.1x 0.5% 0.82x 2.29x 4.50% 4.3 9% 1,772 \$414 0.75x 0.4% 0.95x 2.15x (42.2%) 4.4 9% 1,772 \$16 \$777 14.3x 0.3% 0.51x 1.44x 1.77x 1.479 \$34.9 17.1x 0.6% 0.51x	Agnico-Eagle	AEM	1.68×	3.20×	(2.9%)	%9.96	1,510		\$628	23.4×	0.3%	13.3%
1.02x 2.72x (38.9%) 56.1% 7,715 \$406 15.0x 0.9% 1.02x 2.52x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.02x 2.52x (31.0%) 4.4% 3,803 \$274 11.8x 0.9% 1.40x 2.66x (51.0%) 4.4% 3,803 \$216 13.0x 0.9% 1.17x 2.14x (64.2%) (18.4%) 1,781 \$216 13.0x 0.5% 0.93x 2.30x (41.9%) 43.9% 2.266 \$411 24.1x 0.5% 0.95x 2.15x (42.2%) 35.53 5,529 \$484 17.6x 0.4% 0.51x (44.2%) 43.0% 1,479 \$145 \$177 14.3x 0.3% 0.51x (44.9%) 35.53 1,479 \$384 17.1x 0.6% 1.01x 1.89x (40.6%) 15.1% 824 \$384 17.1x 0.0% 1.01x	AngloGold Ashanti	ANG	$1.13 \times$	$2.69 \times$	(47.9%)	16.6%	4,911		\$305	18.0×	0.4%	28.0%
1.02x 2.52x (31.0%) 78.0% 2,800 \$655 22.8x 0.4% 1.40x 2.66x (51.0%) 4.4% 3,803 \$274 11.8x 0.9% 1.17x 2.14x (64.2%) (18.4%) 1,781 \$216 13.0x 0.5% 0.93x 2.30x (41.9%) 43.9% 2,266 \$411 24.1x 0.5% 0.82x 2.29x (46.6%) 43.0% 1,969 \$484 17.6x 0.5% 0.95x 2.15x (42.2%) 35.5% 5,529 \$484 17.6x 0.4% 0.95x 2.15x (42.2%) 35.5% 1,479 \$445 17.7x 0.7% 0.51x 1.44x 775.1% 25.6% 1,479 \$314 17.1x 0.6% 0.51x 1.44x 775.1% 35.535 0.a.a \$384 17.1x 0.6% 1.01x 1.89x 35.535 0.a.a \$384 17.1x 0.6% 1.02x	Barrick Gold	ABX	$1.02 \times$	$2.72 \times$	(38.9%)	56.1%	7,715		\$406	15.0×	0.9%	13.8%
1.40x 2.66x (51.0%) 4.4% 3,803 \$274 11.8x 0.9% 1.17x 2.14x (64.2%) (18.4%) 1,781 \$216 13.0x 0.5% 0.93x 2.30x (41.9%) 43.9% 2,266 \$411 24.1x 0.5% 0.93x 2.30x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.29x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.15x (42.2%) 35.5% 5,529 \$484 17.6x 0.4% 0.95x 1.44x 775.1% 1,772 \$166 10.4x 1.7% 0.5% 0.51x 1.44x 75.1% 1,479 \$160 \$177 1.4% 0.6% 0.51x 1.44x 75.1% 1,479 \$38.4 17.1x 0.6% 1.01x 1.80x 44.9% 38.2% 35.535 n.a. \$384 17.1x 0.6% 1.10x 1.89x (44.6%) 18.5% 18.5 \$35.0 21.6x 0.0%<	Goldcorp	GG	$1.02 \times$	$2.52 \times$	(31.0%)	78.0%	2,800		\$655	22.8×	0.4%	2.1%
1.17x 2.14x (64.2%) (18.4%) 1,781 \$216 13.0x 0.5% 0.93x 2.30x (41.9%) 43.9% 2,266 \$411 24.1x 0.5% 0.93x 2.30x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.29x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.15x (42.2%) 35.5% 5,529 \$485 12.7x 0.7% 0.51x 1.44x 75.1% 23.7% 1,479 \$166 10.4x 1.7% 0.51x 1.44x 75.1% 25.6% 1,479 \$377 14.3x 0.3% 0.51x 1.80x 38.2% 35,535 n.a. \$384 17.1x 0.6% 1.10x 1.89x 44.6% 44.8% 185 \$520 21.6x 0.0% 1.25x 2.18x 22.4% 4.4% 168 \$1.78 \$673 28.4x 0.0%	Gold Fields	GFI	$1.40 \times$	2.66×	(51.0%)	4.4%	3,803		\$274	11.8×	%6.0	15.4%
0.93x 2.30x (41.9%) 43.9% 2,266 \$411 24.1x 0.5% 0.82x 2.29x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.15x (42.2%) 35.5% 5,529 \$455 12.7x 0.7% 0.95x 2.15x (42.2%) 35.5% 1,772 \$166 10.4x 1.7% 0.51x 1.44x 75.1% 25.6% 1,479 \$166 10.4x 1.7% 0.51x 1.80x 55.9% 25.6% 1,479 \$38.4 17.1x 0.6% 1.01x 1.80x 38.2% 35.535 n.a. \$384 17.1x 0.6% 1.10x 1.80x 44.9% 38.2% 35.535 n.a. \$384 17.1x 0.6% 1.10x 1.89x 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6% 44.6%	Harmony	HAR	$1.17 \times$	$2.14 \times$	(64.2%)	(18.4%)	1,781		\$216	13.0×	0.5%	9.0
0.82x 2.29x (46.6%) 43.0% 1,969 \$484 17.6x 0.4% 0.95x 2.15x (42.2%) 35.5% 5,529 \$455 12.7x 0.7% 0.95x 2.15x (42.2%) 35.5% 5,529 \$455 12.7x 0.7% 0.51x 1.44x (75.1%) (23.7%) 1,772 \$166 10.4x 1.7% 0.51x 1.80x (55.9%) 25.6% 1,479 \$777 14.3x 0.3% 1.01x 2.45x (44.9%) 38.2% 35.535 n.a. \$384 17.1x 0.6% 1.10x 2.45x (44.9%) 38.2% 35.535 n.a. \$384 17.1x 0.6% 1.10x 1.89x (40.6%) 15.1% 824 \$358 13.9x 0.0% - 1.10x 1.89x 44.4% 168 \$313 12.0x 0.0% - 1.10x 1.65x 45.6% 3.8% 1.45x 0.0% - </td <td>Kinross Gold</td> <td>KGC</td> <td>$0.93 \times$</td> <td>$2.30 \times$</td> <td>(41.9%)</td> <td>43.9%</td> <td>2,266</td> <td></td> <td>\$411</td> <td>24.1×</td> <td>0.5%</td> <td>-1.0%</td>	Kinross Gold	KGC	$0.93 \times$	$2.30 \times$	(41.9%)	43.9%	2,266		\$411	24.1×	0.5%	-1.0%
0.95x 2.15x (42.2%) 35.5% 5,529 \$455 12.7x 0.7% 0.51x 1.44x (75.1%) (23.7%) 1,772 \$166 10.4x 1.7% 0.51x 1.48x (55.9%) 25.6% 1,479 \$777 14.3x 0.3% 1.01x 2.45x (44.9%) 38.2% 35,535 n.a. \$384 17.1x 0.6% 1.10x 2.45x (44.9%) 4.15% 824 \$384 17.1x 0.6% 1.10x 1.89x (40.6%) 15.1% 824 \$350 21.6x 0.0% 1.25x 2.18x (22.4%) 4.4% 168 \$313 12.0x 0.0% 1.05x 45.6% (3.8%) 713 \$313 12.0x 0.0% 1.89x 3.57x 12.4% 124 \$1,782 \$0.0% 0.0% 1.89x 3.57x 12.4% 12.4 \$1,782 \$0.0% 0.0% 1.10x 1.81x 22.6	Newcrest Mining	NCM	$0.82 \times$	$2.29 \times$	(46.6%)	43.0%	1,969		\$484	17.6×	0.4%	2.1%
0.51x 1.44x (75.1%) (23.7%) 1,772 \$166 10.4x 1.7% 0.51x 1.80x (59.9%) 25.6% 1,479 \$777 14.3x 0.3% 1.01x 2.45x (44.9%) 38.2% 35,535 n.a. \$384 17.1x 0.6% 1.01x 2.45x (44.9%) 15.1% 824 \$384 17.1x 0.6% 1.10x 1.80x (40.6%) 15.1% 824 \$368 13.9x 0.0% 1.25x 2.18x (22.4%) 4.4% 168 \$313 12.0x 0.0% 1.02x 1.65x (45.6%) (3.8%) 713 \$313 12.0x 0.0% 1.01x 1.67x (45.6%) (3.8%) 713 \$371 14.2x 0.0% 1.89x 3.57x 12.4% 12.5% 832 \$673 28.4x 0.0% 1.10x 1.81x 28.6x 12.9x 0.0% 0.0% 1.10x 1.77x<	Newmont Mining	NEM	$0.95 \times$	$2.15 \times$	(42.2%)	35.5%	5,529		\$455	12.7×	0.7%	3.4%
0.51x 1.80x (59.9%) 25.6% 1,479 \$777 14.3x 0.3% 1.01x 2.45x (44.9%) 38.2% 35,535 n.a. \$384 17.1x 0.6% 1.01x 1.89x (40.6%) 15.1% 824 \$368 13.9x 0.0% 1.10x 1.89x (47.4%) 4.4% 168 \$313 12.0x 0.0% 1.02x 1.65x (45.6%) (3.8%) 713 \$371 14.2x 0.0% 1.01x 1.67x (45.6%) (3.8%) 71.3 \$371 14.2x 0.0% 1.89x 3.57x 12.4% 125.5% 832 \$673 28.4x 0.0% 1.10x 1.77x (28.6%) 20.1% 302 \$437 12.9x 0.0% 1.82x 2.26x (11.7%) 28.4% 0.0% 0.0% 0.0% 1.82x 2.26x (11.7%) 28.4% 0.0% 0.0% 0.0% 1.82x 2.26x<	Polyus Gold	PLZL	$0.51 \times$	$1.44 \times$	(75.1%)	(23.7%)	1,772		\$166	$10.4 \times$	1.7%	9.3%
1.01× 2.45× (44.9%) 38.2% 35,535 n.a. \$384 17.1× 0.6% 1.10× 1.89× (40.6%) 15.1% 824 \$368 13.9× 0.0% 1.25× 2.18× (22.4%) 4.15% 185 \$520 21.6× 0.2% 0.92× 1.65× (45.4%) 4.4% 168 \$313 12.0× 0.0% 1.01× 1.67× (45.6%) (3.8%) 713 \$371 14.2× 0.0% 1.89× 3.57× 12.4% 125.5% 832 \$673 28.4× 0.0% 1.33× 1.91× 18.3% 74.9% 124 \$1,782 50.0× 0.8% 1.10× 1.77× (28.6%) 20.1% 403 \$362 18.3× 0.0% 1.82× 2.26× (11.7%) 28.4% 403 \$362 18.3× 0.0%	Yamana	AUY	$0.51 \times$	$1.80 \times$	(29.9%)	25.6%	1,479		\$777	14.3×	0.3%	1.0%
ABG 1.10x 1.89x (40.6%) 15.1% 824 \$368 13.9x 0.0% AGI 1.25x 2.18x (22.4%) 41.5% 185 \$520 21.6x 0.0% ARZ 0.92x 1.65x (45.4%) 4.4% 168 \$313 12.0x 0.0% CG 1.01x 1.67x (45.6%) (3.8%) 713 \$371 14.2x 0.0% ELD 1.89x 3.57x 12.4% 125.5% 832 \$673 28.4x 0.0% FNV 1.33x 1.91x 18.3% 74.9% 124 \$1,782 50.0x 0.8% GAM 1.10x 1.77x (28.6%) 20.1% 302 \$437 12.9x 0.0% GSS 1.82x 2.26x (11.7%) 28.4% 403 \$362 18.3x 0.0%	Senior Producers T	Total/Average	1.01×	2.45×	(44.9%)	38.2%	35,535	n.a.	\$384	17.1×	%9.0	8.4%
Gold ABG 1.10x 1.89x (40.6%) 15.1% 824 \$368 13.9x 0.0% AGI 1.25x 2.18x (22.4%) 41.5% 185 \$520 21.6x 0.2% ARZ 0.92x 1.65x (45.4%) 4.4% 168 \$313 12.0x 0.0% CG 1.01x 1.67x (45.6%) (3.8%) 713 \$371 14.2x 0.0% FDD 1.89x 3.57x 12.4% 125.5% 832 \$673 28.4x 0.0% FNV 1.33x 1.91x 18.3% 74.9% 124 \$1.782 50.0x 0.8% GSS 1.82x 2.26x (11.7%) 28.4% 403 \$362 \$437 12.9x 0.0% GSS 1.82x 2.26x (11.7%) 28.4% 403 \$362 \$437 12.9x 0.0%	Intermediate Produ	ucers										
AGI 1.25 x 2.18 x (2.24%) 41.5% 185 \$520 21.6 x 0.2% ARZ 0.92 x 1.65 x (4.4%) 4.4% 168 \$313 12.0 x 0.0% CG 1.01 x 1.67 x (4.56%) (3.8%) 713 \$371 14.2 x 0.0% ELD 1.89 x 3.57 x 12.4% 125.5% 832 \$673 28.4 x 0.0% FNV 1.33 x 1.91 x 18.3 % 74.9 % 124 \$1.78 z 50.0 x 0.8% GSS 1.82 x 2.26 x (11.7%) 28.4% 403 \$362 \$437 12.9 x 0.0%	African Barrick Gold	⋖	1.10×	1.89×	(40.6%)	15.1%	824		\$368	13.9×	0.0%	-16.1%
ARZ 0.92x 1.65x (45.4%) 4.4% 168 \$313 12.0x 0.0% CG 1.01x 1.67x (45.6%) (3.8%) 713 \$371 14.2x 0.0% ELD 1.89x 3.57x 12.4% 125.5% 832 \$673 28.4x 0.0% FNV 1.33x 1.91x 18.3% 74.9% 124 \$1,782 50.0x 0.8% GSN 1.10x 1.77x (28.6%) 20.1% 302 \$437 12.9x 0.0% GSS 1.82x 2.26x (11.7%) 28.4% 403 \$362 18.3x 0.0%	Alamos Gold	AGI	$1.25 \times$	$2.18 \times$	(22.4%)	41.5%	185		\$520	21.6×	0.2%	-30.4%
CG 1.01x 1.67x (45.6%) (3.8%) 713 \$371 14.2x 0.0% ELD 1.89x 3.57x 12.4% 125.5% 832 \$673 28.4x 0.0% FNV 1.33x 1.91x 18.3% 74.9% 124 \$1,782 50.0x 0.8% I GAM 1.10x 1.77x (28.6%) 20.1% 302 \$437 12.9x 0.0% GSS 1.82x 2.26x (11.7%) 28.4% 403 \$362 18.3x 0.0%	Aurizon Mines	ARZ	$0.92 \times$	$1.65 \times$	(45.4%)	4.4%	168		\$313	12.0×	0.0%	-48.2%
ELD 1.89× 3.57× 12.4% 125.5% 832 \$673 28.4× 0.0% FNV 1.33× 1.91× 18.3% 74.9% 124 \$1,782 50.0× 0.8% I GAM 1.10× 1.77× (28.6%) 20.1% 302 \$437 12.9× 0.0% GSS 1.82× 2.26× (11.7%) 28.4% 403 \$362 18.3× 0.0%	Centerra Gold	CG	$1.01 \times$	$1.67 \times$	(45.6%)	(3.8%)	713		\$371	14.2×	0.0%	-15.2%
ada FNV 1.33× 1.91× 18.3% 74.9% 124 \$1,782 50.0× 0.8% old GAM 1.10× 1.77× (28.6%) 20.1% 302 \$437 12.9× 0.0% GSS 1.82× 2.26× (11.7%) 28.4% 403 \$362 18.3× 0.0%	Eldorado Gold	ELD	$1.89 \times$	$3.57 \times$	12.4%	125.5%	832		\$673	28.4×	0.0%	-3.0%
old GAM 1.10× 1.77× (28.6%) 20.1% 302 \$437 12.9× 0.0% GSS 1.82× 2.26× (11.7%) 28.4% 403 \$362 18.3× 0.0%	Franco Nevada	FNV	$1.33 \times$	$1.91 \times$	18.3%	74.9%	124		\$1,782	50.0×	0.8%	-11.4%
GSS $1.82 \times 2.26 \times (11.7\%) 28.4\%$ 403 \$362 18.3× 0.0%	Gammon Gold	GAM	$1.10 \times$	$1.77 \times$	(28.6%)	20.1%	302		\$437	12.9×	%0.0	-13.4%
	Golden Star	GSS	$1.82 \times$	2.26×	(11.7%)	28.4%	403		\$362	18.3×	%0.0	-5.4%

Table 11.3 (continued)
Gold Companies

		Price B	e to NPV BMO	NAV Pr	AV Premium (Discount)	Price to NPV NAV Premium Gold Equivalent BMO (Discount) Production 2011E	Adjusted Market Capitalization Per Recoverable Ounce (US\$)		Price to Earnings (×) Dividend Net Debt	Dividend	Net Debt
Company	Ticker	Assur 0%	Assumption 0% 10%	US\$1,	N a	(Thousand Ounces)	Proven& Total Probable Allowable		BMO Assumption 2011E	Yield 2009E	to Equity
IAMGOLD	IAG	1.30×	2.33×	(21.6%)	49.2%	1,132		\$501	18.2×	0.3%	-8.7%
Kingsgate	KCN	$0.74 \times$	$1.26 \times$	(52.1%)	(13.9%)	150		\$359	8.8×	1.3%	-7.7%
Lihir Gold	TGT	$0.54 \times$	$2.18 \times$	(67.4%)	42.9%	1,043		\$346	21.4×	0.8%	-13.7%
New Gold	NGD	0.69×0	$1.71 \times$	(49.6%)	25.1%	443		\$296	19.2×	0.0%	-5.4%
OceanaGold	06C	$0.89 \times$	$1.30 \times$	(47.3%)	(20.8%)	291		\$544	9.7×	%0.0	13.4%
Petropavlovsk	POG	$1.06 \times$	$1.50 \times$	(31.1%)	4.1%	715		\$493	8.2×	1.3%	-3.2%
Randgold Resources	GOLD	$1.47 \times$	$2.76 \times$	(11.7%)	73.4%	841		\$519	23.6×	0.1%	-32.8%
Red Back	RBI	$1.72 \times$	$2.77 \times$	13.3%	%9.66	575		\$635	28.4×	%0.0	-49.6%
Resolute Mining	RSG	$0.88 \times$	$1.22 \times$	(53.1%)	(29.4%)	430		\$200	9.3×	0.0%	24.2%
SEMAFO	SMF	$2.36 \times$	3.58×	45.0%	139.6%	290		\$701	18.2×	%0.0	-8.1%
Intermediate Producers Total/Average 1.32×	ers Total/Average	e 1.32×	2.46×	(28.2%)	26.5%	9,460	n.a.	\$455	22.9×	0.3%	-17.0%
Emerging Producers											
Anatolia Minerals	ANO	0.48×	1.13×	(72.7%)	(37.0%)	126		\$291	12.1×	0.0%	-10.8%
Andean Resources	AND	$0.79 \times$	$1.59 \times$	(47.2%)	13.1%	0	\$288	\$381	nap	nap	0.0%
Andina Minerals	ADM	$0.57 \times$	$1.14 \times$	(74.4%)	(44.7%)	0	\$149	\$201	nm	nap	0.0%
Centamin Egypt	CEE	$1.02 \times$	$1.91 \times$	(37.1%)	25.1%	311		\$343	×0.6	0.0%	~9.9
CGA Mining	CGA	$0.71 \times$	$1.31 \times$	(55.6%)	(12.2%)	237		\$271	5.9×	0.0%	-3.7%
Cluff Gold	CLF	$0.42 \times$	$0.79 \times$	(77.8%)	(58.5%)	102		\$302	4.6×	0.0%	-4.0%
Comaplex Minerals	CMF	$0.82 \times$	$1.70 \times$	(54.0%)	2.8%	0	\$248	\$284	uu	nap	0.0%
Detour Gold	DGC	$0.68 \times$	$1.21 \times$	(59.2%)	(19.1%)	0	\$180	\$233	nap	nap	0.0%
											(continued)

Table 11.3 (continued)
Gold Companies

com combanes											
		Price B	e to NPV	NAV P	AV Premium (Discount)	Price to NPV NAV Premium Gold Equivalent BMO (Discount) Production 2011E	Adjusted Mark Capitalization Per Recoverab Ounce (US\$)	Adjusted Market Capitalization Per Recoverable Ounce (US\$)	Price to Earnings (x) Dividend Net Debt	Dividend	Net Debt
Company	Ticker	Assur 0%	Assumption 0% 10%	US\$1,	US\$1,230/oz 0% 10%	(Thousand Ounces)	Proven& Probable	Proven& Total Probable Allowable	BMO Assumption 2011E	Yield 2009E	to Equity
Dundee Precious	DPM	0.37×	0.37× 0.46×	(68.9%) (60.2%)	(60.2%)	172	(\$19)	\$102	X S. S.	nap	3.9%
Metals Gabriel Resources	GBU	$0.91 \times$	2.42×	(54.0%)	22.8%	0	\$311	\$352	mu	nap	0.0%
Great Basin Gold	GBG	$0.65 \times$	0.99×	(56.7%)	(30.2%)	372		\$264	5.1×	0.0%	8.9%
Greystar Resources Ltd.	GSL	0.36×	$0.81 \times$	(79.9%)	(54.1%)	0	\$150	\$174	mn	nap	0.0%
Guyana Goldfields	GUY	$0.52 \times$	$1.36 \times$	(70.7%)	(23.9%)	0		\$144	50.0×	0.0%	-60.3%
International Tower Hill Mines Ltd	ІТН	0.84×	1.72×	(61.9%)	(5.2%)	0	\$183	\$229	nap	nap	0.0%
Lake Shore Gold	LSG	×99.0	$1.41 \times$	(61.7%)	(19.2%)	154		\$528	17.8×	0.0%	2.7%
Minefinders	MFL	$0.56 \times$	$1.18 \times$	(58.6%)	(14.4%)	180		\$280	7.3×	%0.0	3.4%
Osisko Mining Corp.	OSK	$0.88 \times$	$1.57 \times$	(45.3%)	7.3%	494	\$265	\$294	15.3×	nap	14.4%
Pacific Rim Mining	PMU	$0.23 \times$	$0.42 \times$	(85.4%)	(72.0%)	0	\$101	\$124	nap	nap	0.0%
Rubicon Minerals	RMX	$1.57 \times$	$2.50 \times$	2.6%	71.9%	0		\$595	50.0×	0.0%	23.7%
San Gold	SGR	$0.95 \times$	$1.86 \times$	(39.8%)	25.8%	181		\$363	9.3×	0.0%	-61.2%
Extorre Gold Mines	XG	$1.18 \times$	$1.62 \times$	(4.7%)	34.2%	0	\$872	\$919	deu	nap	0.0%
Emerging Producers Total/Average 0.82×	s Total/Average	0.82×	1.59×	(51.6%) (2.3%)	(2.3%)	2,329	\$230	\$272	10.0×	%0.0	-2.0%

Table 11.3 (continued)
Silver Companies

						Adinotor	Mouleat			
		0% Price to	NAV Premiu	emium	0% Price to NAV Premium Silver Equivalent	Adjusted Market Capitalization Per Recoverable Ounce (US\$)	ization overable (US\$)	Deice to Harmings (<) Dividend Nat Debt	Dividend	Not Dobt
Company	Ticker	Assumption 0% 10%		1	(Million Ounces)	Proven& Total Probable Allowable	Total Allowable	BMO Assumption 2011E	Yield 2009E	to Equity
Senior Producers										
Coeur D'Alene	CDE	$0.88 \times 1.74 \times (38.4\%)$	(38.4%)	25.1%	35.5		\$6.3	21.2×	0.0%	20.0%
Mining E11-	EDES	2000	(/02/00/ // 00/	700	0 17		0 7 \$, ,	×011	10 00/
rr i i i i i i i i i i i i i i i i i i	IIOO		(0//.07)	0.1.70	07.0		0.0	X:11.0	0.376	10.0%
Hochschild Mining	НОС	I./8×	(3.9%)	3/./%	24.0		ο.∞	7/./×	1.0%	29.4%
Pan American Silver	PAA	$0.89 \times 1.55 \times$	(41.9%)	21.1%	37.5		\$3.7	19.0×	0.2%	-2.2%
Silver Wheaton	SLW	$1.06 \times 2.42 \times$	(27.2%)	75.9%	28.6		\$7.7	$20.6 \times$	0.0%	-18.2%
Senior Producers Total/Average	tal/Average	$1.04 \times 2.13 \times (26.8\%)$	(26.8%)	59.4%	193.4	n.a.	\$6.6	18.3×	0.3%	-10.5%
Intermediate Producers	sers									
First Majestic	FR	$0.83 \times 1.16 \times$	1.16× (45.6%)	(1.9%)	8.7		\$3.5	8.2×	0.0%	-9.3%
Hecla Mining	HL	$1.20 \times 1.98 \times$	(5.2%)	65.9%	24.5		\$6.1	19.5×	0.0%	14.5%
Silver Standard	SSRI	$0.75 \times 1.62 \times$	(46.0%)	12.2%	12.1		\$4.6	26.1×	0.0%	4.1%
Silvercorp	SVM	$1.12 \times 1.65 \times$	(14.2%)	82.4%	10.1		\$5.6	29.6×	1.0%	-55.3%
Intermediate Producers Total/Average 1.02× 1.72× (25.2%)	ers Total/Average	$1.02 \times 1.72 \times$	(25.2%)	50.6%	55.4	n.a.	\$5.2	23.4×	0.3%	-10.0%
Emerging Producers										
Bear Creek Mining	BCM	$0.36 \times 0.85 \times$	$0.85 \times (74.8\%)$	(36.8%)	0.1		\$1.5	>50	%0.0	-16.6%
Endeavour Silver	EDR	$1.21 \times 1.56 \times$	(20.0%)	24.5%	5.1		\$8.5	12.2×	%0.0	-4.4%
Minco Silver	MSV	$0.39 \times 0.89 \times$	(81.0%)	(26.5%)	0.0		\$2.3	> 50	%0.0	-19.5%
Orko Silver	OK	$0.78 \times 1.38 \times$	(46.6%)	8.2%	0.0		\$6.7	> 50	%0.0	-62.4%
Sabina Gold & Silver	SBB	$0.92\times$	(66.1%)	11.7%	0.0		\$1.7	> 50	%0.0	-27.0%

Emerging Producers Total/Average 0.66× 1.14× (6 SORCE: BMO Capital Markets. Bloomberg, Thomson Reuters Corp.

-24.6%

0.0%

 $12.2 \times$

\$1.8

n.a.

 $0.66 \times 1.14 \times (62.0\%) (9.3\%)$

in that most of Agnico's value is beyond what it will produce over the next two years. Table 11.3 shows that virtually all precious metals miners trade at a premium to their NPV, which JPMorgan Chase analyst John Bridges attributes to three factors: the expected value of new discoveries; the potential value from additions to new mines; and *optionality*, the potential for higher gold prices, which would immediately impact any miner's NPV.

A third important metric is market capitalization per reserve ounce.* This multiple places a value of all the reserves of a mining company on a per-ounce basis, which essentially tells an investor how much he is paying for each ounce the miner has in the ground. By buying Agnico, one is paying \$628 per ounce, but one could buy Detour Gold at less than half that price. The tremendous variation is due to the market's perception of likelihood that the gold is actually there in the quantities expected, and that it will be extracted—and profitably. A significant portion of Agnico's incremental production will come from mines that are already in operation, and as such are proven, viable assets. But as you can see in Table 11.4, Detour will not be producing any gold until 2012, and before then there are a great many obstacles the company's management needs to overcome to reach its goal—and reach it on time. We also come back to quality of management, and Agnico has a proven track record of delivering, a reputation that the market gives value to.

The market, by which I mean the ocean of global investors voraciously reading up on mining stats and watching computer screens across the world, generally determines the valuation of all stocks in a rational way. That Pacific Rim Mining, which (as you can see in Table 11.4) will not be producing gold for a number of years, is trading at a fraction of what Kinross does has a logical reason. Kinross, guided by a reputable management team, is an established miner that produces millions of ounces of gold each year at multiple mining sites. The upside potential for Pacific Rim, which is certainly far cheaper than Kinross on a market cap/ounce basis, is substantial—but so is the risk of failure. Hence, unless the market has completely missed something (which is a rare occurrence, but can happen), the discovery of any cheap stock

^{*}There are many variations on this metric, both for the numerator, which can be enterprise value, or the denominator, which can be broadened to include resources.

Table 11.4 Gold Production Summary

Senior Producers Company Agnico-Eagle AngloGold Ashanti Barrick Gold Gold Fields Harmony Kinross Gold Newcrest Mining Newmont Mining NEM Polyus Gold Senior North American producer total Senior producers total Mamos Gold AUY AUY Senior producers All ABG A						
can produc			Gold Equivalent Production (Thousand Ounces)	Production (Tho	usand Ounces)	
an produc	2009E	2010E	2011E	2012E	2013E	2014E
can produc	664	1,310	1,510	1,564	1,560	1,853
can produc	4,596	4,460	4,911	4,893	5,143	5,599
can produc	7,394	7,797	7,715	8,215	8,490	8,209
Inning Inning Inning American productor total te Producers ick Gold	2,334	2,542	2,800	3,274	3,426	3,871
an produc	3,348	3,324	3,803	4,028	4,203	4,294
an produc	1,546	1,532	1,781	1,916	1,969	1,968
an produc	2,263	2,266	2,266	2,329	2,572	2,936
nn produc	1,631	1,685	1,969	1,935	2,004	2,227
an produc	5,245	5,366	5,529	5,232	5,339	4,983
an produc	1,198	1,299	1,772	1,894	2,536	2,820
Senior North American producer total Senior producer total Intermediate Producers African Barrick Gold ABG Alamos Gold AGI	1,357	1,481	1,479	1,726	2,068	2,103
Senior producer total Intermediate Producers African Barrick Gold ABG Alamos Gold AGI	19,257	20,762	21,297	22,340	23,453	23,956
	31,576	33,063	35,535	37,006	39,309	40,865
	684	807	824	907	916	895
	178	173	185	225	306	369
Aurizon Mines ARZ	159	142	168	176	271	310
Centerra Gold CG	929	969	713	651	914	986
						(continued)

 Table 11.4 (continued)

Latest Gold Files, Osbiz.	1230/oz						14-May-10
				Gold Equivalen	Gold Equivalent Production (Thousand Ounces)	housand Ounces	(3
Senior Producers Company	Ticker	2009E	2010E	2011E	2012E	2013E	2014E
Eldorado Gold	ELD	360	809	832	918	1,052	1,188
Franco Nevada	FNV	111	105	124	132	130	129
Gammon Gold	GAM	210	255	302	312	351	454
Golden Star	GSS	369	347	403	454	448	431
IAMGOLD	IAG	926	896	1,132	1,073	1,185	1,220
Kingsgate	KCN	94	132	150	233	226	226
Lihir Gold	TST	1,126	1,008	1,043	1,368	1,438	1,414
New Gold	NGD	348	412	443	589	629	645
OceanaGold	OGC	301	275	291	285	282	285
Petropavlovsk	POG	467	652	715	961	957	1,025
Randgold Resources	COLD	491	534	841	698	1,203	1,535
Red Back	RBI	320	487	575	718	824	773
Resolute Mining	RSG	279	330	430	436	438	324
SEMAFO	SMF	242	257	290	287	273	258
Intermediate North American producer total	rican producer total	3,900	4,450	5,167	5,536	6,434	6,764
Intermediate producer total	tal	7,341	8,189	9,460	10,596	11,894	12,468

 Table 11.4 (continued)

Emercina Draducere				3old Equivalent	Gold Equivalent Production (Thousand Ounces)	ousand Ounces)	
Company	Ticker	2009E	2010E	2011E	2012E	2013E	2014E
Anatolia Minerals	ANO	0	29	126	183	310	324
Andean Resources	AND	0	0	0	242	242	363
Andina Minerals	ADM	0	0	0	0	289	289
Centamin Egypt	CEE	0	142	311	344	356	368
CGA Mining	CGA	79	207	237	237	237	228
Cluff Gold	CLF	38	91	102	111	136	179
Comaplex Minerals	CMF	0	0	0	0	265	265
Detour Gold	DGC	0	0	0	154	610	610
Dundee Precious Metals	DPM	109	119	172	187	187	187
Gabriel Resources	GBU	0	0	0	0	0	672
Great Basin Gold	GBG	45	163	372	388	374	365
Greystar Resources Ltd.	GSL	0	0	0	146	288	445
Guyana Goldfields	GUY	0	0	0	113	229	242
International Tower Hill Mines Ltd	ITH	0	0	0	0	0	0
Lake Shore Gold	LSG	7	61	154	209	275	502
Minefinders	MFL	76	131	180	319	371	397
Osisko Mining Corp.	OSK	0	0	494	289	292	740
Pacific Rim Mining	PMU	0	0	0	0	140	140
Rubicon Minerals	RMX	0	0	0	133	203	163
san Gold	SGR	38	92	181	248	252	242
Extorre Gold Mines	XG	0	0	0	0	159	160
Junior North American producer total		267	825	2,055	2,859	3,640	3,837
Junior producer total		414	1,035	2,329	3,699	5,691	6,882

Table 11.4 (continued)

I steet Gold Brice: 118\$1330/oz								14-May-10
					Gold Equivalen	t Production (Gold Equivalent Production (Thousand Ounces)	es)
Emerging Froducers Company	Ticker		2009E	2010E	2011E	2012E	2013E	2014E
Sector Averages								
Senior/Intermediate North	North American producer	total	22,998	25,070	26,296	27,700	29,617	30,409
Senior/Intermediate producer total	er total		38,758	41,110	44,827	47,426	50,931	53,022
Overall North American total	al		23,423	26,037	28,519	30,735	33,528	34,557
Overall total			39,331	42,287	47,324	51,301	56,893	60,214
SOURCE BMO Capital Markets, Bloomberg, I homson Keuters Corp. Latest Silver Price: US\$19.64/oz	US\$19.64/oz	ers Corp.						14-May-10
Senior Producers				Silv	rer Equivalent	Silver Equivalent Production (Million Ounces)	llion Ounces)	
Company	Ticker	2009E		2010E	2011E	2012E	2013E	2014E
Coeur D'Alene Mining	CDE	21.6		25.6	35.5	42.6	42.2	39.6
Fresnillo	FRES	.09		60.3	8.79	75.7	81.7	86.5
Hochschild Mining	HOC	29.7		26.9	24.0	23.8	23.5	23.0
Pan American Silver	PAA	36.4		37.3	37.5	38.9	43.2	49.7
Silver Wheaton	SLW	15.9		23.2	28.6	31.3	41.2	43.0
Senior North American producer total	ducer total	73.8		86.1	101.6	112.7	126.6	132.3
Senior producer total		163.7		173.3	193.4	212.1	231.8	241.7

 Table 11.4 (continued)

Silver Equivalent Producers Silver Equivalent Production (Million Ounces) 2016E 2011E 2013E 2014E 2014E<	Latest Silver Price: US	US\$19.64/oz						14-May-10
FR HL 4.3 7.1 8.7 10.6 11.0 20.3E 20.1E 2013E 2010E 11.0 11.0 11.0 11.0 11.0 2010 11.0 2011	Senior Producers			Silver Ec	uivalent Produ	ction (Million	Ounces)	
FR 4.3 7.1 8.7 10.6 11.0 HL 29.3 26.4 24.5 24.6 26.7 SSRI 1.1 5.9 12.1 19.4 25.6 SVM 7.3 9.0 10.1 11.8 16.2 erican producer total 42.1 48.5 55.4 66.5 79.6 1 bcM 42.1 48.5 55.4 66.5 79.6 1 bcM 60.0 60.0 60.0 60.0 73.6 1 BCM 70.0 60.0 60.0 71.0 7.3 2 MSV 60.0 60.0 60.0 60.0 70.0 7.5 4.9 MSV 60.0 60.0 60.0 60.0 60.0 60.0 60.0 7.5 4.9 SBB 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 Ath Anerican producer total 115.9 134.6 157	Company	Ticker	2009E	2010E	2011E	2012E	2013E	2014E
HL 59.3 26.4 24.5 24.6 26.7 SNR SNR 1.1 5.9 12.1 19.4 25.6 SNR 1.1 1.1 5.9 12.1 19.4 25.6 SNR 1.1 1.1 11.8 16.2 SNR 1.1 11.8 16.1 SNR 1.1 11.8 SNR 1.1 11.9 SN	First Majestic	FR	4.3	7.1	8.7	10.6	11.0	11.1
SSRI 1.1 5.9 12.1 19.4 25.6 SVM 7.3 9.0 10.1 11.8 16.2 erican producer total 42.1 48.5 55.4 66.5 79.6 11 DCM 42.1 48.5 55.4 66.5 79.6 11 BCM 0.0 0.0 0.1 3.3 7.3 7.3 11 BCM 3.5 4.5 5.1 5.7 4.9 11 BCM 0.0 0.0 0.0 0.0 5.1 10.8 MSV 0.0 0.0 0.0 0.0 0.0 0.0 producer total 3.5 4.5 5.2 15.2 30.5 arb 4.5 5.2 15.2 30.5 1.0 rotal 115.9 1.34.6 157.0 179.1 206.2 2 arb 119.4 139.0 162.2 194.3 236.7 4 arb 119.4 </td <td>Hecla Mining</td> <td>HL</td> <td>29.3</td> <td>26.4</td> <td>24.5</td> <td>24.6</td> <td>26.7</td> <td>28.0</td>	Hecla Mining	HL	29.3	26.4	24.5	24.6	26.7	28.0
SVM 7.3 9.0 10.1 11.8 16.2 erican producer total 42.1 48.5 55.4 66.5 79.6 11 bcal 42.1 48.5 55.4 66.5 79.6 11 bcal 42.1 48.5 55.4 66.5 79.6 11 bcal 6.0 0.0 0.0 0.1 3.3 7.3 7.3 BCM MSV 0.0 0.0 0.0 5.1 10.8 7.5 MSV 0.0	Silver Standard	SSRI	1.1	5.9	12.1	19.4	25.6	42.5
erican producer total 42.1 48.5 55.4 66.5 79.6 11 bcal 42.1 48.5 55.4 66.5 79.6 11 bcal 42.1 48.5 55.4 66.5 79.6 11 BCM 0.0 0.0 0.1 3.3 7.3 7.3 7.3 7.3 7.3 EDR 3.5 4.5 5.1 5.7 4.9 7.5 4.9 7.5 MSV 0.0 <td>Silvercorp</td> <td>SVM</td> <td>7.3</td> <td>0.6</td> <td>10.1</td> <td>11.8</td> <td>16.2</td> <td>18.4</td>	Silvercorp	SVM	7.3	0.6	10.1	11.8	16.2	18.4
bcM 0.0 0.0 0.1 3.3 7.3 1 BCM 0.0 0.0 0.1 3.3 7.3 7.3 1.3 EDR 3.5 4.5 5.1 5.7 4.9 1.0 MSV 0.0 0.0 0.0 5.1 10.8 7.5 OK 0.0 0.0 0.0 0.0 0.0 0.0 SBB 0.0 0.0 0.0 0.0 0.0 0.0 producer total 3.5 4.5 5.2 15.2 30.5 rth American producer total 115.9 134.6 157.0 179.1 206.2 2 aducer total 119.4 139.0 162.2 248.8 278.6 311.3 3 a total 119.4 139.0 162.2 254.0 293.7 341.8 4	Intermediate North Ame	rican producer total	42.1	48.5	55.4	66.5	79.6	100.0
BCM 0.0 0.0 0.1 3.3 7.3 7.3 EDR 3.5 4.5 5.1 5.7 4.9 7.3 7.3 MSV 0.0 0.0 0.0 5.1 10.8 4.9 7.5 OK 0.0 0.0 0.0 0.0 7.5 4.9 7.5 producer total 3.5 4.5 5.2 15.2 30.5 7.5 rth American producer total 115.9 134.6 157.0 179.1 206.2 2 actoral 119.4 139.0 162.2 278.6 311.3 3 actoral 119.4 139.0 162.2 254.0 293.7 341.8 4	Intermediate producer tot	tal	42.1	48.5	55.4	66.5	79.6	100.0
0.0 0.0 0.1 3.3 7.3 3.5 4.5 5.1 5.7 4.9 0.0 0.0 0.0 5.1 10.8 0.0 0.0 0.0 1.0 7.5 0.0 0.0 0.0 0.0 0.0 3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 2 205.8 221.8 248.8 278.6 311.3 3 119.4 139.0 162.2 194.3 236.7 2 209.3 226.2 254.0 293.7 341.8 4	Emerging Producers							
3.5 4.5 5.1 5.7 4.9 0.0 0.0 0.0 5.1 10.8 0.0 0.0 0.0 1.0 7.5 0.0 0.0 0.0 0.0 0.0 3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 2 205.8 221.8 248.8 278.6 311.3 3 119.4 139.0 162.2 194.3 236.7 2 209.3 226.2 254.0 293.7 341.8 4	Bear Creek Mining	BCM	0.0	0.0	0.1	3.3	7.3	31.6
0.0 0.0 0.0 5.1 10.8 0.0 0.0 0.0 1.0 7.5 0.0 0.0 0.0 0.0 0.0 3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 2 205.8 221.8 248.8 278.6 311.3 3 119.4 139.0 162.2 194.3 236.7 2 209.3 226.2 254.0 293.7 341.8 4	Endeavour Silver	EDR	3.5	4.5	5.1	5.7	4.9	4.9
0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 205.8 221.8 24.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Minco Silver	MSV	0.0	0.0	0.0	5.1	10.8	11.7
0.0 0.0 0.0 0.0 0.0 3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Orko Silver	OK	0.0	0.0	0.0	1.0	7.5	11.8
3.5 4.5 5.2 15.2 30.5 3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Sabina Gold & Silver	SBB	0.0	0.0	0.0	0.0	0.0	3.1
3.5 4.5 5.2 15.2 30.5 115.9 134.6 157.0 179.1 206.2 205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Junior North American p	roducer total	3.5	4.5	5.2	15.2	30.5	63.0
115.9 134.6 157.0 179.1 206.2 205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Junior producer total		3.5	4.5	5.2	15.2	30.5	63.0
115.9 134.6 157.0 179.1 206.2 205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Sector Averages							
205.8 221.8 248.8 278.6 311.3 119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Senior/Intermediate Nor	th American producer total	115.9	134.6	157.0	179.1	206.2	232.3
119.4 139.0 162.2 194.3 236.7 209.3 226.2 254.0 293.7 341.8	Senior/Intermediate prod	lucer total	205.8	221.8	248.8	278.6	311.3	341.8
209.3 226.2 254.0 293.7 341.8	Overall North American	total	119.4	139.0	162.2	194.3	236.7	295.3
	Overall total		209.3	226.2	254.0	293.7	341.8	404.8

SOURCE: BMO Capital Markets.

really means uncovering the reason for a discount, which one may or may not agree is valid. If you buy a cheap stock (a stock trading at a discount based on P/NPV), you're essentially betting that the market will be proven wrong in time. For example, you may think that Pacific Rim's discount is excessive considering the probability that it will deliver as promised.

Royalty Companies: A Different Play on Precious Metals

The trade-off between risk (operational problems at mines, political risk, reserve, and production growth disappointments) and reward (higher leverage to a climbing gold price, potential for new discoveries, and expanded production) that mining companies present as an investment can be extreme, a fact reflected in trading volatility for the sector. But royalty companies, which are less exposed to many of the miners' operational challenges, can offer a middle ground between the low volatility/low reward of a precious metal ETF or physical investment and the high volatility/higher potential reward of mining stocks.

Royalty companies, of which there are really only a handful listed on stock exchanges (see Table 11.5), derive most of their revenues from royalty streams provided by mining companies. In a typical transaction, a company like Franco-Nevada will provide a mining company with an up-front cash payment to help finance a specific mining operation, say a new gold mine in Peru. In return, the mining company will pay the royalty company a specific percentage of the gold tonnage produced at the mine each year. However, the royalty percentage doesn't have to be derived from the primary metal extracted at a mine; for example, the royalty company could receive the gold or silver by-product streams of a copper mine. And typically, these payments will be made during the entire life of the mine, even if this is decades longer than expected.

The royalty percentage is paid regardless of the costs the miner will need to incur to produce the metal. As such, the royalty company is not exposed to a sudden increase in capital or operating costs—all such risks remain with the mining company. However, despite being insulated from higher operating costs, royalty companies *do* share the miners' political

Price to Cash Flow $23.3 \times 25.5 \times$ $23.0 \times$ $14.8 \times$ Dividend 0.94% 0.71% 0.00% 0.00% Yield Earnings Price to $22.9 \times$ $36.9 \times$ $19.3 \times$ $55.4 \times$ 2011 Earnings Price to $29.3 \times$ 58.5× $65.8 \times$ $61.6 \times$ 2010 UNITED STATES Country of Domicile CANADA CANADA CANADA 6,936,571,000.0 3,632,599,000.0 2,507,030,000.0 371,923,400.0 Market Cap (Local) FRANCO-NEVADA CO SILVER WHEATON ROYAL GOLD INC GOLD WHEATON Name Table 11.5 Royalty Companies Source: BMO Capital Markets. GLW CN FNV CN RGLD Ticker SLW

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and operating risks that could lead to shutdowns and lower production. Although most royalty agreements for a company like Franco-Nevada are revenue-based, there are other royalty agreements (a minority) that do expose the company to operating costs—and leverage to precious metals prices.

Since royalty companies are essentially financial companies (which can be seen as providing the third leg in the financial structure of mining operations that includes debt and equity), their costs related to any project are almost negligible. They are remarkable cash-flow machines that enjoy the highest margins in the precious metals industry—or just about any other industry you can imagine. Consider that Franco-Nevada has a staff of fewer than 25 people and revenues approaching \$200 million, and yet the whole company could almost be run out of a park via laptops. The result is a \$3 billion company with an operating cash flow exceeding 80 percent of revenues. A similar story can be told about Silver Wheaton, which—unlike Franco-Nevada's exposure to other commodities—focuses almost entirely on silver streams from mining operations.

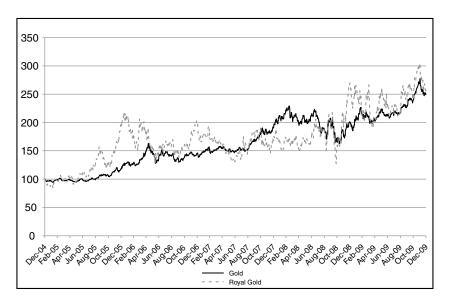


Figure 11.4 Price Performance, Royal Gold versus Gold (Indexed at 100) SOURCE: Bloomberg.

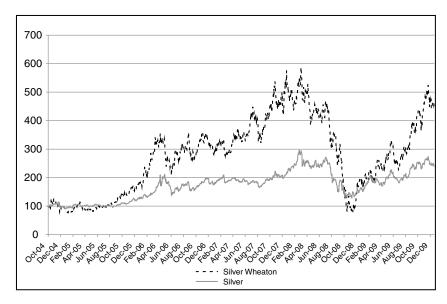


Figure 11.5 Price Performance, Silver Wheaton versus Silver (Indexed at 100) SOURCE: Bloomberg.

Although royalty companies are seen as providing less leverage to precious metals prices than mining companies (since they are insulated from many operating risks), they have performed remarkably well in recent years, as shown in Figures 11.4 and 11.5.

Notes

- 1. This quotation was taken from Douglas Goold and Andrew Willis, *The Bre-X Fraud* (Toronto: McClelland & Stewart, 1997).
- 2. Ibid.
- Canadian Institute of Mining, Metallurgy, and Petroleum, CIM Definition Standards, December 11, 2005.

Chapter 12

Physical Gold: The Importance of Wealth You Can Hold in Your Hands

Gold still represents the ultimate form of payment in the world. . .Fiat paper money in extremis is accepted by nobody. Gold is always accepted.

—Alan Greenspan, 1999¹

hen considering today's financial environment, I think we are living through a crisis of confidence in reverse. The United States was founded in an environment of deep distrust of government and banks, as the world two centuries ago already

had a good understanding of the dangers of monetary excess. Just three generations before American independence from England, France had endured the world's first equivalent of a stock market boom and crash driven by—what else?—excess paper money printing and debt. Following the bust, the collapse of the Banque Royale, and the country's descent into severe inflation and economic chaos in 1720, France returned to the use of gold and silver coinage. It would be 80 years before the country's leaders could reintroduce the use of paper money and banks were widely trusted again, though that was perhaps too soon: During the French Revolution a few years later, France became the first country in world history to experience hyperinflation—that is, an inflation rate exceeding 50 percent per month.²

But today—just two short years after the financial system nearly crumbled in a global banking crisis—almost any person with savings or investments would not question the wisdom of keeping all his financial assets at a bank or in a brokerage account. And there is little concern about the money itself—held either in paper or as cash balances flashing on a computer screen—in which part of wealth is being stored: "Cash is king." After all, most American deposits—which are held by an even smaller concentration of financial institutions than before the 2008 financial crisis—are protected by the federal government, printer of the almighty dollar, the very foundation of the world's monetary system. The dollar has never failed. And yet the U.S. government, which insures the American banking system—a system whose failure would likely cause the collapse of the global financial system—is insolvent. After subtracting the total liabilities (funded and unfunded) exceeding \$100 trillion from the government's assets, one arrives at a deep negative number, and negative equity is insolvency, by definition.* To put \$100 trillion into perspective, it is an amount larger than the capital stock of the United States—all the land, buildings, roads, homes, automobiles, factories, bank accounts, stock certificates, and consumer durables that we own.³ In 2006, when the federal debt was substantially lower than today's, the St. Louis Federal Reserve published a paper asking the frank yet

^{*}Boston University Economist Larry Kotlikoff, an expert on the subject, told me during a telephone conversation in July 2010 that he estimated total U.S. liabilities, funded and unfunded, were of \$202 trillion.

troublesome question, "Is the United States Bankrupt?" Every single one of the 30 recorded instances of hyperinflation in world history was caused by deficit spending that got out of control.

But of course, our leaders have options that can turn around our financial condition—at least for now. Taxes can be raised dramatically and/or some liabilities can simply, legally be walked away from, as a *Wall Street Journal* editorial explained a few years ago: Entitlement benefits like Social Security "are not a contractual obligation in the sense that a T-bond is" and there is "no such legal right to Social Security." Such explanations, which allow us to temporarily ignore the astoundingly difficult financial choices our government will need to face very soon to escape from de facto insolvency, have placed us into a crisis of confidence in reverse: We may be suffering from an *excess* of trust and a deficit of financial caution.

We trust that, despite the long historical evidence to the contrary, government will be able to meet its obligations while also preserving the value of money, and avoid an inflationary spike. If this were not the case, I think more individuals and institutions would own at least a modicum of physical gold, which is the only investment vehicle that provides full insulation from the financial system and government itself. That so few own gold today is a historical anomaly. Thomas Jefferson, the author of our Declaration of Independence would be astonished to hear of our confidence in government and banks, both of which have long histories of fallibility. And it's not as if financial adversity is something we've left in the distant past of the eighteenth century. Royal Bank of Scotland, the world's largest bank, and AIG, the largest insurer, both collapsed within the lifetime of my eight-year-old son.

One cannot obtain ultimate financial protection—that is protection from a global bond market crisis and banking system failure—by resorting to the multiplicity of downside protection derivatives and insurance protection bonds that financial institutions and governments provide. Financial institutions, no matter how strong, all present the investor with counterparty risk, the risk that a given institution's obligations won't be met. And a significant part of that counterparty risk was transferred to governments during the 2008 crisis in what Gerard Minack, the chief global strategist at Morgan Stanley, called "The Great Swap": By way of multibillion-dollar bailouts, a substantial part of the debt and risk of

the world's financial firms was transferred to Western governments. At great expense to taxpayers of the perhaps immediate future, the U.S. government was able to keep Lehman Brothers (which ultimately folded), AIG, and Citigroup, institutions holding trillions in assets, from bringing down the American financial edifice. But if you believe there is a risk that our profligate leaders may fail during the next crisis, holding part of your wealth in the form of financial assets you can hold in the palm of your hand is worth considering.

In a nutshell, gold makes sense as an investment to me at this point in financial history because (1) it has never been more underowned as a financial asset (there is latent demand); (2) it is extremely scarce and has a fixed supply (implying that a potential short-term rise would be steeper than it might be for, say, stocks or real estate, for which supply can be increased); (3) financial leverage in the world economy has never been higher, which historically has been a precursor to a surge in inflation and financial market turbulence; and (4) considering the last point, there is significant risk that world leaders, in addressing our present deep economic challenges, will in time begin imposing financial restrictions that to some degree impede the proper functioning of major financial markets—stocks, bonds, foreign exchange, derivatives, and commodities.

Such a situation could complicate trading purely in paper gold, and one could visualize a scenario under which financial restrictions could be imposed on the ownership of precious metals ETFs. And it is not just an extreme event, like the outbreak of war or some other kind of financial system-threatening emergency, that could lead to interference in the way ETFs trade. Consider a scenario perhaps several years into the future: If investment in gold, silver, and other ETFs rose to such an extent as to become disruptive to the proper functioning of the financial markets—as deemed by financial authorities—it would be relatively easy for them to order restrictions or that they simply be shut down. It would make sense for them to consider doing so in such an event. As discussed toward the end of Chapter 6 and in Chapter 15, there is a precedent for a gold rush in 1933 that ultimately forced the government's hand and gold bullion ownership was prohibited. But this was obviously before the advent of ETFs, to which potentially tens of billions of dollars can flow in a single day. Keep in mind that precious metals ETFs are completely

new in the financial system and, considering the minuscule size of the metals market, they could lead to bubbles that the Federal Reserve or other regulators may try to control in some manner, perhaps through higher tax rates. This might seem to be an extreme scenario, but gold is an asset one expects to perform well during extreme situations.

In such extreme situations, physical stores of wealth—particularly the most liquid and easy to transport ones, like precious metals coins—would become increasingly important and perhaps trade at a substantial premium to equivalents traded on financial exchanges. In fact, gold and silver coins already trade at high premiums to the prices of those metals on the spot market due to their scarcity. As a result, owners of physical gold—particularly those who bought before the 2008 financial crisis, when spreads were much lower—have enjoyed a small bonus over those who bought ETFs as a result of the physical premium. Over the past three years, the U.S. Mint has repeatedly run out of gold and silver coins, even when it began inflating premiums over spot prices to meet much larger than expected demand: There were buyers even when gold and silver coins were being sold at spreads in excess of 10 percentage points over spot prices, which is extremely high.

Writing in the present financial tranquility of April 2010, following a remarkable financial market recovery and the first positive employment report in years, I see it as highly unlikely that authorities will negatively alter the conditions under which we invest in precious metals instruments—mostly stocks and ETFs. Today I am comfortable owning shares of GLD, the most liquid and reputable gold ETF, which was set up by the World Gold Council. But the weather can change—as can the will of our leaders—and owning some physical gold and silver, and perhaps platinum, makes sense considering present financial conditions. Throughout history, financial markets have been shut down temporarily during times of crisis and, though we know that markets always eventually reopen, there can be extended periods of financial uncertainty during which precious metals coins have preserved and risen in value and when their physical nature has given them a premium.

Table 12.1 is a list of the major ways in which you can own gold (and, in most cases, other precious metals) today. I presented this table in my first book about gold, but have updated it based on changes in

Gold
Own
Ways to
12.1
Table

Paper Gol	In Paper Gold Between	Physical Gold	Pros	Cons	Investment Safety	Investment Investment Safety Potential	Liquidity	Government Risk	Score
1 Mining stocks, gold funds			Can rise faster than gold or silver Very easy to buy and sell Ability to leverage	No gold under your physical control Many of same risks attached to other stocks Wall decline faster than gold in down market	2	rv	ıo	E.	15
Commodity options and futures			 Very easy to buy and sell Futures can take physical delivery Ability to leverage 	Risk of regulatory change affecting use Delivery of gold not guaranteed (could be in cash if gold unavailable)	4	rv	ហ	1	15
ETFs			 Very easy to buy and sell Represents gold ownership Highly liquid 	No gold under your physical control Risk of government interference Cannot be redeemed for gold	4	п	w	1	13
	Redeemable ETFs (recently launched)		 Easy to buy and sell Represents gold ownership Can be redeemed for gold 	No gold under your physical control Risk of government interference No track record of management reputation	4	ч	4	1	12
	GoldMoney.com	tito.	 Very easy to buy and sell Gold is actually owned Highly liquid 	No gold under your physical control Though gold is not lent, requires trust in management	4	Ю	4	4	15
		Allocated bullion bank account	Gold is actually owned ondividual bars assigned specifically to you Stored safely	No gold under your physical control You are allowing a bank to owe you something Risk of government interference	4	т	4	-	12
		Unallocated bullion bank account	Gold is actually ownedGold is pooledStored safely	No gold under your physical control You are allowing a bank to owe you something Risk of government interference	4	п	4	1	12

16	17	15	11
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4	ю	1	-
<i>(</i> 0	4	4	1
ro	и	и	4
 Need to personally store Risk of theft 	Can rise faster than • Not easy to sell quickly gold or silver • Down market periods can be deep, Historically has lengthy outperformed stocks • Need to personally store Gold is owned,in	Not easy to sell quickly Down market periods can be deep, lengthy Need to personally store	Likely to redeem only fraction of gold value Not easy to sell quickly
Gold bullion • Relatively easy to coins/bars buy and sell • Transaction costs higher • Gold is owned/in physical possession	Can rise faster than gold or silver Historically has outperformed stocks Gold is owned/in physical possession	Can rise faster than gold or silver Historically has outperformed stocks Gold is owned/in physical possession	• Gold is owned/in physical possession • Fashionable/ aesthetically pleasing
Gold bullion coins/bars	Gold "common date" coins	Rare coins	Jewelry
∞	6	10	11

Scale: 1_5 5 is best

These numbers are based on the judgment of the author. I would not suggest buying gold based on the best score, but rather based on what fits a reader's individual needs. For example, if you do not believe "government risk" is a concern, then bullion, commodity futures and bullion bank accounts would be more attractive than the score above implies.

Investment Potential: A score of 3 means the asset will rise or fall in line with the market price of gold; 4 or 5 indicates the probability that the asset would rise more than gold or silver (or fall Investment Safety refers to ultimate safety, meaning which is safest in conditions of extreme financial stress. Hence, this is not an issue in normal conditions. Safety is low for mining stocks oecause of equity market and operational risks. It is high for physical gold, being outside of paper financial markets, yet it suffers from low liquidity. more in a precious metals bear market). Jewelry was rated 2 because it will typically be bought at or below melt (the price of gold in the market).

Liquidity refers to the ease of buying and selling the asset. Rare and "common date" coins score poorly because they are difficult to sell in a hurry. Jewelry might be easy to sell quickly, but at a very low price.

rising rapidly. GoldMoney is based away from the United States to prevent the possibility of government intervention in its management. Rare coins, gold and silver coins with numismatic value, (once again) to interfere with the private ownership of gold. Mining stocks receive a 4 because, in periods of financial stress, their corporate tax rate could be raised, especially if gold prices are Government Risk means risk that government could change the rules of the game in gold ownership. A score of 5 means virtually no risk and 1 means high risk if the government decided Score is based on a simple addition of the four factors. have never been confiscated.

Note: I'd like to thank Erik Townsend for assisting with part of the information in this table.

financial conditions and the addition of new investment vehicles that have become available since then. I scored each of the ways to own gold based on four factors that I discuss; however, this is not scientific. I would not suggest buying gold (or other precious metals) based on the best score, but rather on what fits a reader's individual needs. Before briefly explaining the way I scored the investment vehicles, I'll describe two you might not be familiar with.

- Redeemable ETFs. These have been formed recently to offer a product for investors who want a vehicle that can be converted into physical gold on demand. Although there has been nothing to suggest that exchange-traded gold fund managers have mismanaged their assets, some observers have suggested that there could be multiple claims to at least part of the gold that is owned under the respective trusts. Also, there has been some concern that owners of gold ETF shares would never be allowed to exchange them for the physical gold held in a vault. (ETF managers would not dispute this, and one pointed out to me: "Those that want to own their own bars should just go out and buy them"—and he has a point: concerned investors can pay more and store gold at home or in a bank vault, if they think this is safer.) Those who share these concerns can invest in shares like the recently launched PHYS gold fund, which claims to have more clarity about the ownership of its gold and which allows investors to redeem their shares for physical gold (at a slightly higher management fee). The gold fund was launched by Sprott Asset Management, which has a strong reputation in Canada.
- GoldMoney.com. GoldMoney was launched in early 2001 as a unique innovation allowing investors to buy and sell physical precious metals online 24/7. Their digital gold currency (silver and platinum are also options) is then stored in specialized bullion vaults of their choice located in Zurich, London, and Hong Kong, thereby providing good geographical diversification.

Customers have access to their metal similar to the way online banking gives you access to your dollars. So you can use the metal as currency by clicking a weight of it to another account, while the metal remains safely stored in the vault. The ownership of the metal changes, not its location. A unique benefit of GoldMoney is that your precious metals are very liquid and can be quickly turned into any national currency that can be wired to your bank account anywhere in the world. Customer assets in GoldMoney have risen fivefold to almost \$1 billion since I wrote about them in my previous book three years ago. Visualize an online bank that holds your money in the precious metal of your choice but does not lend out your money as a bank would.

Skeptical potential account holders might be concerned that they cannot actually see the gold being held on their behalf, which is a legitimate fear. In the early 1980s, International Gold Bullion Exchange, once the largest gold bullion dealer in the United States, shocked thousands of customers when it was discovered that gold bars in the company's vault were actually made of wood. Tens of millions of dollars were lost. To provide its customers with assurances of integrity, GoldMoney has a well-defined governance procedure. This includes using a private storage company (Via Mat International Ltd., a highly regarded Swiss company) so that GoldMoney employees never actually handle any metal.

In addition to listing the major pros and cons of the various ways of owning gold as listed in Table 12.1, I scored each vehicle based on my personal views regarding investment safety, investment potential, liquidity, and what I call government risk. The scale is 1 to 5, with 5 being the best score. A higher score is positive, as it reflects combinations of ultimate investment safety, the potential to outperform the price of gold, the ease of buying and selling an asset, and low risk of government interference. I'll briefly define these terms as they apply to gold, which is not the same as they would be used with other investment assets.

• Investment safety refers to ultimate safety, meaning which vehicle is safest in conditions of extreme financial stress. Hence, this is not a consideration for normal conditions, but rather that of a situation of severe financial dislocation. While this may appear to be an extreme consideration, gold is an asset that is often owned to deal with extreme situations. Considering this definition, safety is

low for mining stocks because of equity market and operational risks, but high for physical bullion coins (which are outside financial markets).

- Investment potential refers to the ability to rise faster than the price of gold, hence the emphasis is on potential and not on the higher volatility that such an instrument may present. A score of 4 or 5 gives a high probability that the asset would rise more than gold or silver (or fall more in a precious metals bear market), which is why mining stocks score high. Jewelry scores poorly because it will typically be bought at or below melt (the price of gold in the market). This means that jewelry will always underperform gold unless the transaction is carried out in parts of Asia, where the jewelry is often bought and sold based on weight.
- Liquidity is simply the ease of buying and selling the asset, which is an important consideration for gold as several key investment vehicles can have low liquidity. Rare and *common date* coins score poorly because they are difficult to sell in a hurry. Jewelry might be easy to sell quickly, but at a very low price.
- Government risk is the risk that the government could change the rules of the game in gold ownership. (See the next section.) A score of 5 means virtually no risk and 1 means high risk if the government decided (once again) to prohibit private ownership of gold. Mining stocks receive a 4 because, in periods of financial stress, their corporate tax rate could be raised, especially if gold prices are rising rapidly. GoldMoney.com is based away from the United States to prevent the possibility of government intervention in its management (although this does not make it completely risk-free, since governments can monitor transfers). Rare coins, gold and silver coins with numismatic value, have never been confiscated, which is why they receive a high score on this metric.

The score I gave each of these gold ownership vehicles is based entirely on my judgment. I would not suggest buying gold based on the best score, but rather based *entirely* on what fits your individual needs. For example, if you do not believe government risk is a concern, then commodity futures would be more attractive than the score in the table implies.

Would the U.S. Government Ever Confiscate Gold Again (As It Did in 1933)?

In 1933, President Franklin D. Roosevelt ordered confiscation of private citizens' gold to prevent a deflationary catastrophe. As people withdrew deposits from banks—and sold dollars, per se—to buy gold, money was being pulled out of productive activities in the economy. There was a need to create inflation and encourage people to spend so that economic activity could be reactivated—by force. Confiscation meant that individuals were forced to sell their gold at a depressed price, just before the government increased the dollar value of gold in an effort to raise the price level in the economy. The policy was aimed primarily at helping the depressed farming sector, which was suffering from a collapse in crop prices. Consider that at one point during the Depression in certain parts of the country the price of corn went negative: A farmer had to pay a silo to take corn off his hands. (As an aside, it was unfortunate that few investors considered silver at the time, which could be freely owned and which tripled in price in just over two years due to government intervention to reflate the economy!)

The aim of confiscation is clear and rational from the point of view of financial authorities, and the risk should not be dismissed outright: If a widespread gold rush were to begin, as it did in the early 1930s, money would be pulled out of productive activities and—most critically—the funding of government deficits via the bond market, which would perhaps lead to deflation. In bad times, governments often *force* people to spend in many ways, and there is a long history of government confiscation of gold that extends back for many centuries, even to the days of the Roman Empire. But there are five reasons why I think the risk of government confiscation of gold today is much lower than it was when FDR and his cabinet were considering the move in the 1930s.

1. Financial markets today are international, capital flows can be virtually instantaneous, and most gold is held outside the United States. In 1933, American citizens owned physical gold and typically held it in a safety deposit box at the local bank. Today, gold can be held in an electronic account on the other side of the planet. I could sell shares owned in a gold ETF listed on the Singapore stock exchange

- at 3 A.M. Austin, Texas, time and the funds could be transferred immediately to an account in Zurich, Switzerland, where I could order that funds be converted into gold bars—or something rarer, like Swiss Helvetia gold coins from the 1920s—all before I had breakfast. Any hint of gold confiscation in the United States would cause financial mayhem, the ultimate result of which would be completely unpredictable and likely bad. GLD, the largest gold ETF in the world—one in which the fund managed by American John Paulson is the largest shareholder—deposits its gold in London.
- 2. Any change in gold policy could cause a dollar crisis. In 1933, despite the terrible economic environment, the dollar was very strong and FDR's efforts to make it fall—even when he ordered gold confiscation—were unsuccessful. The dollar remained strong because many other countries were in worse shape and American gold holdings were massive, a vital consideration in times when gold was used to back the value of money. Today, any hint that the U.S. government was changing its policy on gold would lead foreigners—which today own most of the U.S. Treasury bonds in circulation—to question American motivations and wonder about the government's solvency. If gold was being confiscated, what next? The move could lead to a fire sale of American assets, a serious risk U.S. authorities are well aware of.
- **3.** Nobody owns gold today, anyway. Gold confiscation is only a realistic risk in the possible future, when more people might own gold. It would not make any sense today. An extremely low percentage of Americans own gold as an investment. Gold represents less than 1 percent of global financial assets under management.
- **4.** A confiscation of gold, which might negatively affect global prices, could provoke a confrontation with China. Even though Chinese authorities may not discuss it openly, gold has become a strategic asset for the nation. China is the world's biggest producer of gold and it recently gave clear evidence that it is beginning to replace part of its dollar-dominated reserves with gold. A confiscation move would rattle global gold markets, and it is unlikely that China would not react strongly if the U.S. carried out such a move.

5. Confiscation today would have to be a globally coordinated policy decision, a daunting objective. Since markets are globally liquid and trillions of dollars move around the globe every single day, gold confiscation (in whatever form such a policy were implemented) would have to be carried out by all major economies. Otherwise, the announcement of capital controls—which is what gold confiscation would imply, by extension—would lead to money flowing out of the jurisdiction where the change in financial regulation had been announced.

President Roosevelt ordered the confiscation of gold in 1933 because he wanted people to stop investing in an asset that was deflationary, one that pulled money out of productive activity and was leading the nation into a downward spiral. He was adamantly opposed to the (then) radical step of printing additional dollars, and forcing citizens out of gold seemed to be the next best option.⁶ But in the 1930s, private capital mobility was extremely low and was conducted at a glacial speed by present standards, so there was not much worry about money being moved out of the country. Capital moved physically and there was a growing hesitance to invest abroad as economic turmoil took on an international dimension. The rest of the world was in a depression, as well, and new trade restrictions were also having an effect on capital mobility. Europe, still recovering from the devastation of World War I and a prostrate Germany, was not a place where dollars were likely to flow. Gold confiscation did not lead to any notable capital flight from the United States.

However, today there is a much deeper concern about the economic situation of the United States relative to the rest of the world and, considering both the size of American liabilities relative to GDP as well as the need for foreign capital to finance our deficit spending, gold confiscation today could have dire consequences. Europe is experiencing serious financial difficulties at present, but there are a great many jurisdictions that have a history of respect for financial privacy and gold ownership, like Canada and Switzerland, to which money could be moved extremely rapidly. If limits were imposed on gold transactions and ownership, the stunned reaction in the investment community could lead to unpredictable movements in the foreign exchange markets. Consider that trillions of dollars are transferred every day in currency

markets: The equivalent of U.S. GDP changes hands every week. A change in gold rules could lead to speculation regarding further moves that would affect ownership of other U.S. assets, like U.S. Treasury bonds, the vehicles needed for funding government. Considering the probable tumultuous reaction that such a decision might provoke—as well as the simple fact that gold is an asset that very few individuals and institutions own today—it is unlikely that U.S. authorities would attempt to confiscate gold. The financial world is far too complex for a 1930s strategy to work again.

Notes

- 1. Greenspan was quoted in Holly Watt and Robert Winnett, "Goldfinger Brown's £ 2 Billion Blunder in the Bullion Market," *Sunday* Times, April 15, 2007.
- Janet Gleeson, Millionaire: The Philanderer, Gambler, and Duelist Who Invented Modern Finance (New York: Touchstone, 1990), 225. The French experience with hyperinflation in the nineteenth century represented the first known incident of hyperinflation in human history, as discussed in Peter Bernholz, Monetary Regimes and Inflation: History, Economic and Political Relationships (Northampton, MA: Edward Elgar Publishing, 2003).
- 3. Jagadeesh Gokhale and Kent Smetters, "Do the Markets Care About the \$2.4 Trillion U.S. Deficit?" *Financial Analysts Journal*, March/April 2007.
- 4. Lawrence Kotlikoff, "Is the United States Bankrupt?" Federal Reserve Bank of St. Louis, July/August 2006.
- 5. "The Entitlement Panic," Wall Street Journal, August 22, 2006.
- 6. Jordan Schwarz, 1933: Roosevelt's Decision: The United States Leaves the Gold Standard (New York: Chelsea House Publishers, 1969), 106.

Chapter 13

How to Invest in Coins and Bars (Without Getting Ripped Off)

here has never been an easier time to buy gold with confidence than today, thanks to reliable physical delivery systems and the Internet.* Much of the purchasing of physical gold in the United States today is done in cyberspace, where a great many precious metals businesses, small and large, compete. Type "buy gold" in your Web search engine and the number of gold products offered will make

^{*}Parts of this chapter were taken from my book Buy Gold Now. Reprinted with permission by John Wiley & Sons.

you dizzy. Much like purchasing a book on Amazon.com, once you have found a trustworthy gold dealer, you can buy hundreds of thousands, if not millions of dollars in gold online and have the precious acquisition insured and mailed to you with confidence that the investment will arrive safely. Crazy as it sounds to *mail* gold, consider the win-win coin toss implied in over-insuring: If you mail \$10,000 in gold but insure it for \$12,000, heads you get your \$10,000 in gold, tails you get \$12,000 in cash.

A great many millions of dollars in gold are mailed across the United States every year, though these precious packages are generally insured and labeled in a way that do not give away the contents. And a million dollars in gold would probably not be sent in a single package! I bought some of my first gold, Swiss Helvetia coins from the 1920s, over the Internet and I nervously waited—and repeatedly phoned the firm that sold me the gold—for the postal card telling me I could pick the package up at the post office. Since then, I have sent and received a great many golden parcels across the country—always cautiously packaging and fully insuring each one—and have yet to face a problem other than a delay.

Any business that involves money attracts sleazy people who will try to rip you off, and the gold business is no exception. There are several shops—some well-known in the precious metals dealer community that take advantage of novices who are perhaps nervously buying gold for the first time, and these firms prey on their clients' vulnerability. Here's an example: During the summer of 2006, the U.S. Mint released an eagerly-awaited new gold coin, the American Buffalo, the first U.S. coin minted in 24-karat gold (the previous ones had been 22-karat). A lot of excitement was generated by the release, and many new buyers, fearing the newly issued coins could get away from them forever, forgot the simple truth that the coin was still just an ounce of gold and that tens of thousands of them would be minted. With these coins being worth less than \$750 each, there was a particular shop that was offering them openly, on the Internet, at \$2,000 each. But as I wrote about that in the summer of 2007, the coin was available for under \$1,000. And today, even after gold has risen significantly, you can find the coin easily over the Internet, day or night, in certified flawless condition for well under \$1,500...or cheaper by the dozen! Buying gold is often like buying a car: Even brilliant men and women with PhDs can be turned into suckers. Remember that there is always a place for you to get ripped off legally, and the gold business is no exception.

Use the Internet to your advantage in two ways. First, choose a gold dealer with whom you can establish a relationship of trust and try to find an individual there who has been at the firm for at least a few years. If you don't feel comfortable talking with him or her for any reason, speak to someone else! A solid gold dealer can steer you away from bad deals and direct you toward potentially profitable ones. They want you to profit because your disappointment will make them lose your business. A good place to start looking is to find an authorized dealer with the Professional Coin Grading Service (www.pcgs.com) or the Numismatic Guaranty Corporation (ngccoin.com) listed on their web sites. See if the dealer's web site reveals the number of years the company has been operating, with less than 10 years possibly being a concern. A firm's web site should also reveal whether it belongs to the local Better Business Bureau, which I think is an indispensable requirement.

Second, once you have determined what you are going to buy, get a price from your dealer and check it on the Internet. By Googling the precise product you are buying, like a 2009 American Eagle one-ounce gold coin, you can quickly find out what price you could pay by shopping elsewhere. If you find that you could buy the coin for a few dollars less at another, perhaps less trustworthy shop, it might not be worth the trouble, but if substantially more were involved, then you might ask your dealer if he can match the lower price. He might not be able to beat the price, but then you will need to consider the confidence you have in the other dealer you've found on the Web. As with any purchase, be wary of prices that are too low, which might be a sign of trouble. Once you've decided to go ahead with your first acquisition with a new shop, you might want to start with a small purchase, perhaps using the company's web site for an electronic transaction, and see how smoothly the process goes.

The physical gold market really is a market: You can haggle! If you don't like a price, say so! But keep something in mind. Gold dealers are used to dealing in high dollar amounts, and even if they are handling a \$100 order for a person of modest means, this may have been after discussing a \$500,000 deal with another client. If you are buying two bullion gold coins (a transaction under \$3,000 as of this writing), don't think you are smart in gaining five dollars from the dealer after imploring him for a better deal. You may feel wiser for making a few bucks, but by annoying the dealer, you will probably be called last when he gets notice of a desirable new shipment of gold or silver coins that are likely

to fly. Keep in mind that, when the gold market heats up, you could find yourself begging for attention at that understaffed—as they all tend to be—shop, so best to make a friend. I'd suggest driving a bargain when it is worth it. A dealer will respect you for trying to get a fair deal, but I wouldn't waste precious time over a few bucks that might represent 0.20 percent of your order.

You can save money on your precious metals purchases by talking with a person instead of buying online. Quite often the 24-hour prices you see on web sites for Internet orders are not the lowest you will be able to find. To protect themselves against an overnight rise in the price of gold (something happening more and more often), dealers often list prices that are slightly higher than they would offer over the phone. Call a gold shop and try to get a better price, which most of the time you will. Like most other businesses, a gold dealer will not want to disappoint you, knowing you have many other places to buy gold thanks to the glory of the Internet. This might expose you to an undesirable conversation with a person who would like to sell you more, but with a "Thanks, I'm not interested in anything else," you could save yourself a lot of money.

Other than choosing the wrong gold dealer or not verifying that you are getting a fair price, perhaps the biggest mistake you can make is to fall into the urgency trap. Like autos at the car lot, precious metals products often seem to be running out, or prices about to rise like crazy, and the coin you are interested in might be getting away from you. But, alas, they are still there tomorrow and next week . . . unless the precious metals market is hot! When gold broke \$500 and kept going past \$600 in early 2006, dealer inventories were being depleted, prices were rising very rapidly (especially key rare coins), and coins were getting away from buyers. Scarcity of coins has been rising significantly in recent years. But if, at the time you are buying, the market is relatively stable, be patient. Hang up the phone or step away from your computer and think about it before buying anything.

Chapter 14

The Most Widely Respected Investment Coins

This chapter presents the basic high-quality precious metal coins that are generally accepted around the world without question.* There are a great many physical options for investing in precious metals that one finds at the coin shop or when shopping online. Some of them, like gold *rounds*—which are not government-minted, as coins are—are best avoided if your objective is no-nonsense physical precious metals investment. I think this is best explained by a paragraph I wrote in my previous book:

^{*}I would like to thank the staff of Austin Rare for their help in gathering information used in this chapter.

If a gold salesperson or web site tells you of some uniquely valuable gold coin or medal, such as a coin commemorating the sixtieth anniversary of the end of World War II or Mickey Mouse's birthday, which is priced more than 10 percent above its gold content, I hope you truly love it. Because if you don't and decide to sell it in a few years you are likely to hear a dreaded word from a potential buyer at a coin shop: melt. Coins, medals, or bars that are not uniquely desirable in the marketplace—the large physical marketplace where hundreds of different coins and items made of gold are exchanged—will be bought at melt, meaning based solely on their gold content. If gold were trading at \$680 an ounce and you bought a one-ounce coin for \$782 (at a 15 percent premium for the once-in-a-lifetime opportunity) and decided to turn around and sell it, you would probably get \$680 for it—less a charge for taking the coin to the gold scrap shop, where all the other unforgettable events are forgotten. As I'll discuss in the rare coin section, I think this approach makes sense if you are buying gold as an investment: Unless you are Bill Gates, buy gold thinking you (or a relative or an heir) will probably want to sell it someday. You should try to buy gold in a form that will be relatively easy to sell (like a bullion gold American Eagle or MS64 \$10 Liberty from the late 1800s) because it is very well known and popular.

(If you're not already familiar with coin terminology, you'll understand what MS-64 means after reading Chapter 15 on rare coins.)

The bullion coins—that is, coins that are not yet rare and hence lack numismatic value—presented in this chapter are a great way to invest in gold or silver. A 2009 or 1992 American Gold Eagle minted by the U.S. government will be widely accepted for decades if not always. Millions of Eagles have been minted, millions are owned, and millions—okay, maybe hundreds of thousands—trade hands each year. And there are multiple advantages to investing in high-quality coins rather than bars, several of which many new investors in hard money might not know about:

• High-quality gold or silver coins are widely accepted among gold dealers around the world. While a bar can be looked at with suspicion—and

large ones are hard to sell—high-quality coins are easy for dealers to work with and are often preferred.

- The coins are the most liquid form of physical hard money. Since they are minted in low denominations (generally less than an ounce per coin), values are relatively low, which allows a larger number of potential investors to be interested in the market.
- They command a (growing) premium. While one always pays a premium over the spot price of gold or silver to acquire any coin, the premium can also rise for the seller, as has been happening in recent years as coin scarcity has grown. (One could have paid a premium over spot of 3 percent for an American Eagle in 2007 and sold the same coin at a premium of 5 percent over spot in 2010.)
- High-quality bullion coins are acquiring scarcity value. For the past few months (writing in May 2010), the U.S. Mint has not had any coins for sale on its web site, which implies that high-quality coins are scarce. The mint has simply run out and new issues have been selling rapidly in recent years.
- High-quality bullion coins gain numismatic value over time. Obvious as it sounds, the coins minted in 2009 will never be minted again. There can be no IPOs of 2009 coins, and hence their scarcity will grow. Hence, bullion silver American Eagles from certain years in the 1980s and 1990s are worth triple the value of their silver content. Think about that for a minute. If you bought a bullion silver coin when silver was trading at under 5 dollars in 1998, you not only more than quadrupled your money because of the rising price of silver—you also made money on the growing scarcity value of the coin. This is why it is important to protect the coin from scratches.

Although there are a great many gold coins, you will notice that most of the bullion gold coins that circulate widely in the world have only been around since the 1980s, the exception being the South African Krugerrand and the Canadian Maple Leaf. There was a lengthy period during which gold coins were not being minted, at least in any significant quantity, between 1933 and the mid-1960s. During this time, owning gold bullion was prohibited by law in the United States, a fact that influenced other world mints. But in 1974, the U.S. government ended

the ban on private ownership, which gave way to mintage of most of the coins described in this chapter.

Gold American Eagle



Figure 14.1 Gold American Eagle Source: Austin Rare Coins.

The Gold American Eagle, the most popular bullion coin in the United States, is minted in 22-karat gold and has been struck each year since inception in 1986. The coin's obverse is similar to the \$20 St. Gaudens gold coin commissioned by President Theodore Roosevelt, which was struck between 1907 and 1933, when gold was confiscated by the U.S. government. (Note of historical interest: Surviving 1933 St. Gaudens coins, of which only a handful exist, are worth tens of millions of dollars each.)

Denominations: Gold Eagles are normally struck in 1-ounce, $\frac{1}{2}$ -ounce, $\frac{1}{4}$ -ounce, and $\frac{1}{10}$ -ounce sizes. The year 2009 saw very low fractional mintage because of overwhelming demand for the 1-ounce size.

Pricing: Premiums over spot for gold Eagles have risen steadily with the price of gold in recent years. These have the highest wholesale bid when sold back. Eagles are the most popular gold bullion coin sold at Austin Rare Coins in Austin, Texas. As of this writing, the retail premium was around 6 to 8 percent over spot, depending on the quantity acquired.

Gold American Buffalo



Figure 14.2 Gold American Buffalo SOURCE: Austin Rare Coins.

The Gold American Buffalo is the first and only 24-karat gold coin ever minted in the United States. The first issue was struck in 2006, and has remained in production ever since. However, its supply at the U.S.

Mint has been interrupted repeatedly due to continuing unexpectedly high demand for coins. The coin's beautiful design was modeled after Buffalo nickels that were produced during the early 1900s.

Denominations: Buffaloes are normally struck in 1-ounce sizes except for 2008, when $\frac{1}{2}$ -ounce, $\frac{1}{4}$ -ounce, and $\frac{1}{10}$ -ounce coins were struck. Pricing: The fractional coins minted in 2008 command a substantial premium from collectors due to their rarity and unique mintage. Premiums for one-ounce coins are in line with Gold American Eagles but can rise when demand outstrips supply or when the Mint halts production. Retail premium is 7 to 8 percent over spot depending upon quantity acquired.

Canadian Maple Leaf



Figure 14.3 Canadian Maple Leaf Source: Austin Rare Coins.

The Canadian Maple Leaf, one of the world's most beautiful coins, has been struck each year since 1979. Produced in 24-karat gold, it is

one of the purest gold coins struck in the world today at 99.99 percent purity. The coin's obverse depicts the famous Canadian Maple Leaf.

Denominations: Maple Leafs are normally struck in 1-, $\frac{1}{2}$ -, $\frac{1}{4}$ -, $\frac{1}{10}$ -, and $\frac{1}{20}$ -ounce sizes.

Pricing: Being one of the most widely recognized and hence liquid bullion coins in the world, premiums have risen over time with the gold price. Retail premium is 6 to 7 percent over spot depending on quantity acquired.

South African Gold Krugerrand



Figure 14.4 South African Gold Krugerrand Source: Austin Rare Coins.

The South African Gold Krugerrand, produced in 22-karat gold, has been struck in South Africa since 1967. It is the most popular and liquid bullion coin in the world. The coin's obverse depicts Paul Kruger, four-term president of the old South African Republic.

Denominations: Krugs were the only option for bullion coin investors until Maple Leafs were introduced in 1979. The coins are normally struck in 1-, $\frac{1}{2}$ -, $\frac{1}{4}$ -, and $\frac{1}{10}$ -ounce sizes.

Pricing: Because they are the most common gold bullion coins circulating throughout the world, they are generally sold at the lowest premium of any gold coin. Although the coin's premium has risen in line with other world mint issues, the Krugerrand is the coin of choice for those wanting to buy the most gold for the money. As of this writing, the retail premium is 6 to 7 percent over spot depending on quantity acquired.

British Gold Sovereign



Figure 14.5 British Gold Sovereign Source: Austin Rare Coins.

The British Gold Sovereign, produced in 22-karat gold, was first struck in 1489 and is still being minted today. Sovereigns are widely known and recognized all over the world—so much so that the coins

were chosen as currency that American fighter pilots carried in their pockets during the first Gulf War in case they were shot down and needed to barter. Most of the Sovereigns sold today date from the 1900–1933 period. The coin's obverse depicts St. George slaying a dragon.

Denominations: Sovereigns are smaller coins that are minted in roughly $\frac{1}{4}$ -ounce denominations. (It takes 4.24 coins to make a full ounce of gold.)

Pricing: In the past, premiums have gone as high as 90 percent over melt when demand was high. But at present premiums are roughly in line with modern fractional gold coins. As such, Austin Rare Coins points out that, considering the very steep premium the coins commanded over history, perhaps some investors might find them attractively priced at present.

Chinese Gold Panda



Figure 14.6 Chinese Gold Panda Source: Austin Rare Coins.

The Chinese Gold Panda has been struck each year since 1982 in 24-karat gold. The obverse design changes each year, though it always features a panda. China also mints silver Panda coins. The coins are preferred due to their extremely high quality.

Denominations: The coins are normally struck in 1-, $\frac{1}{2}$ -, $\frac{1}{4}$ -, $\frac{1}{10}$ -, and $\frac{1}{20}$ -ounce sizes.

Pricing: Pandas are normally struck in lower quantities than most of the gold bullion coins minted around the world. Premiums have risen steadily with the price of gold and they are among the higher ones for wholesale and retail. The retail premium is around 10 percent over spot, depending on quantity acquired.

Australian Gold Kangaroo



Figure 14.7 Australian Gold Kangaroo Source: Austin Rare Coins.

The Australian Gold Kangaroo, minted in 24-karat gold, was first struck in 1986. The coin's obverse depicts a different design of a Kangaroo each year.

Denominations: The coins are struck in 1-kilo, 10-ounce, 2-ounce, 1-ounce, $\frac{1}{2}$ -, $\frac{1}{4}$ -, $\frac{1}{10}$ -, and $\frac{1}{20}$ -ounce sizes. The Australian Mint encapsulates each coin individually in plastic for its protection.

Pricing: Premiums are in line with most other world bullion issues, with retail premiums of 6 to 8 percent over spot depending on quantity acquired. Austin Rare Coins staff indicated that, as of this writing, they have been selling more Australian gold than ever before due to their reasonably low premiums and impeccable quality.

Austrian Gold Philharmonic



Figure 14.8 Austrian Gold Philharmonic Source: Austin Rare Coins.

The Gold Austrian Philharmonic has been struck in 24-karat gold each year by the Austrian Mint since 1989. The obverse depicts the great organ in the Golden Hall in Vienna's Musikverein Concert Hall.

Denominations: They are normally struck in 1-ounce, $\frac{1}{2}$ -, $\frac{1}{4}$ -, and $\frac{1}{10}$ -ounce sizes.

Pricing: As with other high-quality coins, Philharmonic premiums have risen steadily with the gold price. The retail premium as of this writing was around 7 percent over spot depending upon quantity acquired.

Swiss PAMP Gold Bars



Figure 14.9 Swiss PAMP Gold Bar SOURCE: Austin Rare Coins.

Swiss PAMP bars are minted in 24-karat gold. PAMP is the acronym for Produits Artistique de Metaux Precieux, a refinery in Castel San Pietro, Switzerland. These gold bars are refined to 99.99 percent purity, assayed, and certified and sealed at the refinery in a plastic card, with certified assay notice and serial number on the certificate/card. These die-struck bars feature the attractive Fortuna portrait common to bullion products by PAMP, a worldwide refiner and marketer of precious metals.

Denominations: PAMP bars are normally struck in 5- and 10-gram, 1-ounce, 10-ounce, and 1-kilo bar sizes.

Pricing: PAMP bars are very popular due to their low premiums over gold weight, which have remained relatively stable even while coin premiums have risen. The one-ounce bars are the most popular and can be bought for less than 3 percent over spot gold, though premiums can be lower with higher quantities.

Silver American Eagle



Figure 14.10 Silver American Eagle Source: Austin Rare Coins.

The Silver American Eagle is the most popular silver bullion coin in the world today. It has been struck every year since 1986. The coin's obverse was taken from the "Walking Liberty" design by Adolph A. Weinman, which originally had been used on the Walking Liberty half dollar coin of the United States from 1916 to 1947.

Denomination: Silver Eagles are only minted in one-ounce denominations, although they are frequently sold in 500-count boxes called *monster boxes*. These are sealed by the U.S. Mint and contain 25 rolls of 20 coins per roll.

Pricing: Premiums have risen with the price of silver. Austin Rare Coins staff indicated that they have seen situations where premiums in the wholesale market rise considerably when demand exceeds supply. Investor demand for silver recently has forced the U.S. Mint to discontinue the proof version of this coin. At the time of writing, retail premiums were at around 18 to 20 percent over spot silver.

Silver Kookaburra



Figure 14.11 Australian Silver Kookaburra Source: Austin Rare Coins.

The Silver Kookaburra is a beautifully designed silver coin struck by the Perth Mint in Australia every year since 1990. The design is changed each year. Denominations: Kookaburras are produced in four sizes: 1 kilo, 10-ounce, 2-ounce, and 1-ounce. Each coin comes in a plastic capsule.

Pricing: Premiums have remained steady but sell for more than most of the world's minted bullion silver coins. Retail premiums are around 30 to 35 percent over spot, depending on the quantity bought. Given the changing design and high quality of the coins, Kookaburras have become more of a collector coin than an investor option. The quality is second to none, which is a reason for the higher premiums.

Platinum American Eagle



Figure 14.12 Platinum American Eagle Source: Austin Rare Coins.

The Platinum American Eagle is the official platinum bullion coin issued by the United States and is the most popular platinum coin in the world. The coin's obverse depicts the head of the Statue of Liberty.

Denominations: Platinum Eagles are normally struck in 1-ounce, $\frac{1}{2}$ -, $\frac{1}{4}$ -, and $\frac{1}{10}$ -ounce sizes of 0.9995 pure platinum.

Pricing: The U.S. Mint discontinued the bullion coin in 2009 due to overwhelming demand for Gold and Silver American Eagles. But since it did produce a limited number of 1-ounce proof coins in that year, these trade at a high premium. Premiums are around 10 percent over spot depending upon the size of the order. Due to the fact that they're not producing the bullion coins currently, Austin Rare Coins foresees premiums rising in the future.

Chapter 15

Rare Coins: An Attractive Market Unreachable to Fund Managers

All persons are hereby required to deliver on or before May 1, 1933, to a Federal Reserve Bank or branch or agency thereof or to any member bank of the Federal Reserve System all gold coin, gold bullion, and gold certificates.

—President Franklin Delano Roosevelt, April 5, 1933¹

n one of the worst years of the Great Depression, the federal government required the great number of citizens taking financial refuge in gold to surrender it in exchange for Federal Reserve notes that were

soon to be printed in large quantities.* In the stroke of a pen, the White House withdrew the economic freedom implied in gold and decreed, in essence, that inflation would be created by force. What Alan Greenspan once referred to as the hidden confiscation of wealth had begun.²

The announcement came just weeks after Roosevelt's inauguration as well as a flurry of bank panics and holidays during which doors remained closed, to the horror of depositors. It truly was horror. Literally thousands of banks across the country were collapsing as mobs of worried people ran them, hoping to recover their savings at a time when deposits were not government-insured, as they are today. And then the federal government, worried about a run on its own gold reserves and massive exports of gold to Europe, seemed to be taking away the last refuge for the public's wealth. Well, almost the last. Treasury Secretary William Woodin ensured, in the Gold Reserve Act of 1934, that coins with a "recognized special value to collectors of rare and unusual coin" would be exempt from gold confiscation.³

It is for this reason that to this day gold dealers often refer to some gold products—all gold bullion, including coins—as *confiscatable* and others as *nonconfiscatable* in reference to coins that have numismatic value, which is to say rare coins. To make this distinction may seem quaint today, since American citizens have been allowed to own gold bullion since 1974, and the country's monetary system appears to be functioning as it should, despite surging debt levels, increasingly volatile financial markets, and a falling dollar. But in the future, if an economic calamity, such as a dollar crash, causes a global panic and surge of money out of paper currencies and into hard money, the government may once again force us out of gold. Confiscation risk is evidently very low today, but in the event of a sudden mass flight to gold—which would most certainly be a concern for government leaders—you would be wise to buy some rare coins. You would also be wise to buy them in normal times.

Since the 1940s, perhaps the highest possible long-term investment return in an index of any kind has been found in the American rare

^{*}Other than the title, this chapter is reprinted from Shayne McGuire, Buy Gold Now with permission from John Wiley & Sons.

coins market. Two renowned rare coin experts, David Ganz and David Bowers, maintain rare coin indexes that have beat stocks by a wide margin for years. Ganz's rare coin index rose an average 13.7 percent per year between 1938 and 2004, compared with 8.4 percent for the Dow Jones Industrial Average, and Bowers' index has shown similar performance.⁴ And considering that the Dow has been regularly pruned of poorly performing stocks over the years, rare coins' outperformance is actually even stronger. In early 2006, a 1927 gold coin auctioned for \$176,000 in 1982 was sold for \$1.9 million.⁵ But those lacking a million or two to spare have taken comfort in the fact that multiple other rare coins—a great many selling for under \$5,000 today—rose during this period, as well, though less dramatically. There is a rare coin market at all price levels, and values have continued climbing during this decade, sometimes faster. Several pre-1933 gold coins selling for under \$1,000 in October 2005, like \$10 gold Indian Head coins in a grade known as MS-63 (explained later in this chapter), had doubled in value eight months later.

But the price for such impressive performance is mostly patience. Coin prices typically rise in violent spurts over several months, as seen with the \$10 gold Indian Head mentioned previously, and then can remain dormant—or decline—over subsequent months. Since the rare coin market tends to move in cycles of four or five years under normal market conditions, that is often the time needed to show a healthy profit. Coin expert Scott Travers wrote that a holding period of 10 years is ideal, and I think many coin specialists would say two to three years is reasonable, making the rare coin market intensely unattractive today to traders wanting to flip stocks for a fast profit. Successful rare coin investors buy the best coins they can afford at reasonable prices and lock them away for years. This long holding period provides rare coin investors with high potential rewards, but a not-insignificant risk is the need to sell too soon at a loss. Rare coins are long-term assets.

Absent today, there used to be an additional cost inherent in buying rare coins. Although the market was strong in the late 1960s and throughout the 1970s, it was very difficult for novices to profit in the market because only experts knew how to compare the quality of different coins with precision to determine their value. While there has long been a widely accepted grading scale, evaluating any given coin was a highly subjective undertaking, and what for one grader could be a \$1,000 coin was worth \$1,800 for another. But since the mid-1980s, when widely respected institutions launched a new grading system, most well-preserved coins today are certified with quality and rarity recognized by virtually all coin dealers. In fact, a great many certified coins are traded sight unseen, meaning certified coins don't even need to be seen and held to be acknowledged as holding a defined value. The market has also become far more transparent thanks to the Internet, where buyers and sellers can look up prices and verify important information about virtually any coin.

Some of the most popular and well-known precious metal rare coins were minted roughly between the 1890s and 1933. These pre-1933 *common date* or *generic* gold and silver coins, as they are typically called, include the gold Liberty Head, Indian Head (see Figure 15.1), and St. Gaudens,



Figure 15.1 1932 Indian Head Gold Coin SOURCE: Austin Rare Coins.

as well as the Morgan and Peace Silver Dollars.* But common date rare coins differ from exceptionally rare ones from the same period, like the singular gold 1933 Double Eagle—which you would be lucky to buy for under \$10 million if you could legally own it—in that the market for them is relatively liquid: There are millions of common date coins, like the St. Gaudens and Liberty Head, on the market, but only a few thousand in great condition. Common date coins are abundant enough that most investors can afford them and thus profit from investing in the rare coin market. With gold trading near \$670 an ounce as this was written, a good-quality Morgan Silver Dollar could be had for \$100 and common date one-ounce gold coins for around \$1,000.

WHAT IS A COMMON DATE OR GENERIC COIN?

A common date or generic gold or silver coin is the name given to the millions of coins that were minted in the United States roughly between 1890 and 1933, the year in which the U.S. government prohibited citizens from owning gold bullion and when it stopped minting gold coins. Although several coins from this period are exceptionally rare (like the 1907 "Rolled Edge" \$10 Gold Piece, of which less than 50 survive in mint state), common date coins were minted in large quantities and many survive today. A typical generic would be one of the coins listed in Table 15.1, but generally in a grade below MS-65, since the coins are rarer in higher grades, and hence far more expensive—by tens, if not hundreds of thousands of dollars!

A classic common date rare coin is the 1904 Liberty Head \$20 gold coin, of which over six million coins were minted. However, only a few hundred thousand of them survive today, and of those the ones that have been certified make up the coin's (Continued)

^{*}You can see images of these coins by going to www.pcgs.com and clicking on the "Coin Guide" tab on the bottom left of the web site. You can also Google the coin name and find images on dealers' web sites. I generally go to goldinfo.net, which is linked to Austin Rare Coins.

population. A coin's *population* determines its rarity, and evidently rarer coins are worth more. Table 15.1 lists some common dates that have a large population, which makes them less expensive than exceptionally rare coins, but which nevertheless have a fixed amount available. Obvious as it sounds, they will never be minted again, and yet the number of potential buyers will always be rising.

Table 15.1 A Sample of Common Date 9	Coins in MS	5-63
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Coin	Year	Mintage (Millions)	Price in 2007	Premium over Raw Gold/Silver
\$20 Liberty Head	1904	6.3	\$1,050	62%
\$20 St. Gaudens	1924	4.3	\$900	38%
\$10 Indian Head	1926	1.0	\$1,450	346%
\$10 Liberty Head	1899	1.3	\$1,250	285%
\$5 Indian Head	1909-D	3.4	\$2,950	1,715%
\$5 Liberty Head	1899	1.7	\$950	485%
\$2.50 Liberty Head	1907	0.3	\$1,050	1,192%
\$2.50 Indian Head	1929	0.5	\$1,350	1,562%
Morgan Silver Dollar	1883	12.3	\$50	285%
Peace Silver Dollar	1925	10.2	\$35	169%

All premiums (approximate) are based on gold and silver ounce prices of \$650 and \$13, respectively. All \$20 coins contain roughly one ounce, \$10 coins half an ounce, \$5 coins one-quarter of an ounce, and \$2.50 coins one-eighth of an ounce of gold. Silver dollars contain roughly an ounce of silver.

SOURCE: R.S. Yeoman, A Guide Book to United States Coins, 2007 (Atlanta: Whitman Publishing, 2006).

WHAT IS MEANT BY "DOUBLE" EAGLE?

When American gold coins began to be minted in the late eighteenth century, Congress ordered that the first gold coins be called *eagles* with a value of \$10 and containing roughly half an ounce of gold. Half-eagles worth \$5 and quarter-eagles worth \$2.50 also went into circulation, and double-eagles with a value of \$20 and containing just under a full ounce of gold were minted for circulation for the first time in 1850. Thus, the list in Table 15.1 is ordered from double eagles (\$20) at the top to quarter eagles (\$2.50) at the bottom.

I believe that many pre-1933 gold and silver rare coins will continue to rise faster than the metal prices themselves in the years to come. In the 1980s, a great number of investors were attracted to the rare coin market—many out of concern about the rising government deficit at the time—and while interest diminished during the 1990s stock market boom, investment demand has risen in recent years as gold and silver have continued to climb, while the number of coins remains relatively fixed. (There's always the unlikely chance that more coins can be found somewhere.) Each time gold has rallied, rare coins have risen much faster, as buyers have entered the market to purchase the dwindling supply of coins.

If the dollar continues to fall and gold breaks above \$1,000 and higher, as I expect it will, many newcomers to the market—particularly middle-class Americans diversifying their assets away from turbulent financial markets—will force a sharp squeeze of the tiny rare coin market, which probably trades less than \$500 million in a typical year; that's about the value traded in less than an hour on a slow day at the New York Stock Exchange. And if the dollar truly does collapse, there will be few financial assets in which to take refuge from a fall in global wealth. U.S. government bonds, the traditional asset class to hide in during times of financial turmoil, would likely decline sharply in value. And the very few stores of value that are trusted beyond bonds would skyrocket. Ultimately, there is nothing safer than gold that you can hold in your hand, and coins minted long ago, by virtue of their rarity and accepted value, will be as safe as gold—but far more valuable.

Some Basic Ideas behind Investing Profitably in Rare Coins

Following are seven broad ideas you should keep in mind before investing in rare coins. As with most major purchases, you need to consider both price and quality to arrive at a good investment. The following ideas will help you ascertain both.

1. Rare coins are not a short-term investment, and prices can be volatile. If you are considering investing in rare coins, you must first accept that a rare coin is an investment that you should expect to hold for

at least two or three years, something that you want to buy and lock away as one of your most valuable possessions. As such, I think rare coins should represent less than 10 percent of your investments. I like to think of an exceptional rare coin as one of my children's college saving funds, a store of wealth that is secure from financial adversity and that I know will be available in the future. Profits can come suddenly, but most experts advise against investing for short-term profits in the rare coin market, even though there have been several important periods when prices have risen by leaps and bounds. While a sharp fall in the dollar could make rare coins begin to surge in value, profit in rare coins usually goes to those who are patient. If you might need to sell it in a hurry in less than two years, you should think twice about buying a rare coin.

As is well known in the gold business, the bid-ask spread in the rare coins market is large. What this effectively means is that a rare coin shop generally needs to raise its coin prices at least 15 percent above cost, and that it will buy coins back at a discount. This is a low-volume business of high-value products, and like other businesses of this kind—like luxury goods stores—the margins have to be high for the firms to be profitable. As a result, when you buy a rare coin you are generally starting out underwater: You need the coin you bought to rise by 15 percent or more just to break even. This is why it is best to wait some time before selling. Although rare coins have outperformed stocks over time, some investors steer clear of the market, or risk trying to buy wisely on eBay or in some other direct market where there are no guarantees, because the large markups at coin shops bother them. I think getting the right price is important, but so is buying from a reputable firm. Anyone entering the rare coins market should consider both carefully.

2. Always beware of rip-off coin shops and web sites. Keep in mind what I have said throughout this part of the book: Gold has a way of attracting swindlers who will try to take advantage of you. A St. Gaudens gold coin minted over 80 years ago may seem priceless, but millions of them were minted. Although a far lower number survive in truly superb condition, many are less rare than you would think. Understand what you are buying before you write a check. Even if you are buying from a dealer or web site that you trust, as with any

- gold or silver bullion or rare coin price, compare the price with others you find on the Internet. If a dealer or web site is selling a coin that is 40 percent over- or underpriced, something is not right!
- 3. Pick coins that are popular with both investors and collectors. Many rare coins, like pennies and nickels, have been great investments. And if you decided to pick up Bowers' The Expert's Guide to Collecting & Investing in Rare Coins, a 600-pager, or the hundreds of other books published on the subject, with a great deal of time and effort you might discover a way to profit from 1905 music box tokens. But you might also find that these century-old tokens can still be had for a few dollars because hardly anybody knows they exist!9 And perhaps most importantly: Hardly anybody cares. One of the most important things to keep in mind when buying a rare gold or silver coin for investment is that you will want to sell it in the future: Stick with precious metal coins that are widely desirable, that any coin dealer is familiar with, and you will find that there are really only a handful of rare coins that are truly and ultimately liquid. There will generally be a buyer for them when you need to sell.

Keep in mind that many extremely rare coins are inexpensive. They only become expensive when many people want to buy them. And there are other special, widely recognized coins that some collectors have been waiting for years to get their hands on and would be willing to pay a high price for. Unless you want to invest the lengthy time and deep effort needed to become a serious coin collector/investor, I recommend staying with pre-1933 common date gold Liberty Heads, Indian Heads, and St. Gaudens gold coins, and Peace and Morgan silver dollar coins, all of which have been on collectors and investors' minds for decades. These are rare in that there is a fixed supply of them on the market, and yet common enough that any dealer is very familiar with them. (Several of them are listed in the section entitled "What Is a Common Date or Generic Coin?")

4. Only buy certified rare coins. Here is an opportunity to lose a lot of money: Buy a rare coin that has not been certified. (See Figure 15.2 to see what a certified rare coin looks like.) Unless the price



Figure 15.2 Example of a Certified Rare Coin Source: Austin Rare Coins.

of a rare coin is very near the price of gold (say a premium below 15 percent, as is the case with the very common pre-1933 Swiss Helvetia), its premium over gold will be based on the coin's authenticity, grade, and rarity. Huge premiums, which can run into the millions of dollars, are paid for rare coins of exceptional rarity and condition. For example, the 1870–S three-dollar gold piece in good condition, which contains less than an ounce of gold, is worth perhaps \$3 million! With certification, a coin's authenticity and graded condition are clearly established so that both buyer

and seller have only price to debate.* Though price is market determined—and one must do a little research on the Internet to determine what the right one is—you can cover the other variables in a coin's value by limiting your investments to certified rare coins.

There are a great many subtleties in coin grading, about which hundreds of books have been written, but basically coins are graded on a scale of 1 to 70: A coin graded 70 is flawless, as if fresh from the mint, and a grade of 1 is reserved for coins with virtually unrecognizable images and words. Coins graded between 60 and 70, representing their good condition, are regarded as being uncirculated and in mint state (MS). So a 1913-D St. Gaudens coin, with a "-D" indicating it was minted in Denver (see Table 15.2), in very good condition might have a grade of MS-65. But a dealer might call it a "Saint in 65," as the "MS" is redundant: Anything above a 60 will be in mint state.

Although there are others, the Professional Coin Grading Service (PCGS) and the Numismatic Guaranty Corporation (NGC)

Table 15.2 Mints and Mint Marks

Mint marks are letters found on coins that show where they were minted. You will find them on many of the coins in your pockets on the "heads" side.

- С Charlotte, North Carolina (gold coins only; 1838–1861)
- CCCarson City, Nevada (1870-1893)
- Dahlonega, Georgia (gold coins only; 1838–1861) D
- D Denver, Colorado (1906 to date)
- ONew Orleans, Louisiana (1838–1861; 1879–1909)
- Р Philadelphia, Pennsylvania (1793 to date; P absent in early years)
- S San Francisco, California (1854 to date)
- W/ West Point, New York (1984 to date)

As you might expect, some of the most valuable rare coins were minted in Carson City, Charlotte, and Dahlonega, where coin production ended more than a century ago.

SOURCE: R. S. Yeoman, A Guide Book to United States Coins, 2007 (Atlanta: Whitman Publishing, 2006).

^{*}Very occasionally, someone, usually an expert, will find a coin that appears to have been graded too low. Taking a chance, he or she might break the seal of the clear plastic case containing the coin and send the raw coin to be certified with the hope that a new grade will be higher.

are the two most respected coin grading companies in the United States. Each coin they receive for grading is subject to examination by numismatic experts in a rigid certification process in which the final product is an authenticated and graded coin, such as the one shown in Figure 15.2. Each certified coin is sonically sealed in a tamper-evident clear plastic holder that displays its biographical information, the firm's trademark hologram, a bar code, and a unique number that registers the coin with either PCGS or NGC. You can find greater detail about the grading process at their respective web sites.

- 5. When investing, buy high-quality rare coins. Here's the simple reason why you generally want to buy pre-1933 coins (again, referring specifically to that deep market of coins minted roughly during the 40 years ending in 1933) with a high grade: Graded below MS-60, coins like gold St. Gaudens and Morgan silver dollars with scratches and other defects are so common that they trade near the value of their metallic content. Actually, the coins are so common that they are rarely even graded, since grading costs around \$20 a coin, hence reducing potential profit. If gold is trading at \$650 an ounce, you can probably find an 80-year-old gold ounce coin in poor condition not too far above that price. But unless you just want it for a collection, this would probably be a bad investment because such a coin would be unlikely to outperform gold or silver bullion prices. And, perhaps more importantly, it would be far easier to sell a modern bullion coin, so—aesthetics aside—why even buy a scratched-up St. Gaudens when you can get a pristine 2008 American Eagle gold coin straight from the U.S. Mint?
- 6. Find a dealer you can trust and verify that you are getting good prices. If you are planning to make a major investment in rare coins, I would strongly recommend that you take your time in finding a good rare coin dealer, as discussed in Chapter 13. In addition to having a verifiably solid reputation established over at least a decade, a good dealer will listen to what you are looking for—for instance, "I want to make a bold bet to profit from rising gold prices" or "I just want protection"—and suggest diverse investment strategies at a competitive price. If some coins are suggested that you are

not familiar with, remember that it is best—at least until you learn more about rare coins—to stick with well-known coins that are highly liquid. You might already have a few coins in mind and he might suggest others. But when it comes down to settling on prices, keep in mind that you should check them with competitors and at web sites like www.pcgs.com. Prices will rarely be exactly the same, but at least you will get a sense of the kind of deal you are getting. This could take some time, but you will find that prices can vary widely. As discussed Chapter 13, you will need to find a balance between price and value of service. A trustworthy dealer could cost a little more, but the relationship might be worth the price.

7. If you are looking for high-end rare coins, consult with an expert. In this chapter I have been referring to modestly priced gold rare coins that are not worth more than, say, 15 times the value of their metallic content. (See "What Is a Common Date or Generic Coin?") But some of the biggest investment gains have been in rare coins of which only a handful are available, such as the common date coins discussed earlier that are in uncommon condition. Here's an example: A 1909-D St. Gaudens \$20 gold coin in MS-60 was worth about \$1,800 when these words were written, but the same coin in MS-67—a much better preserved coin of greater rarity—was valued at a whopping \$175,000.

But such a coin would generally be traded between coin experts acting on behalf of clients who pay them a fee, or perhaps a markup on the coin's cost, to execute the transaction. Many high-end coin investors ask that coin shops actively seek specific unique coins that might take an expert years to locate. Others are simply looking for any special opportunity to acquire truly rare coins that can cost more than a new car—or fleet. Quite often, coin buyers prefer to remain anonymous, as was the case in the 2002 auction of a 1933 gold Double Eagle. The opening bid was \$2.5 million, but few know who wrote the \$7.6 million check after the Sotheby's gavel was finally slammed. The high-end rare coin club is exclusive, but there are quite a few gems selling in the \$10,000 to \$30,000 price range for those looking to make more modest acquisitions.

While an amateur could distinguish between a coin graded in MS-60 and another in MS-67, given the evident visual dissimilarity, the subtle differences between a 66 and 67—or the actual numeric grade assigned to any unique coin—can only be determined with precision by an expert. If you are considering investing in unique rare coins running into many thousands of dollars in value, you should spend some time finding a trustworthy professional individual or company with a great reputation. This is the only way to ensure a given coin's authenticity and grade, and trust is vital when it comes to determining value. Because, although you can try to check prices online, the rarer coins become, the less pricing information is available. And quite often, the last price seen for a given ultra-rare coin could have been set at a trade made years in the past, making its present value more difficult to ascertain. The coins listed in Table 15.3, which include some of the rarest in the world, only trade every few years—and the top two may never change hands again.

Some Final Thoughts on Investing in Rare Coins

A perennial rule of thumb has been to invest in the highest-grade coin that one can afford. And judging by the price performance of the extraordinary coins in Table 15.3, it is clear that the rarest of the rare have appreciated the most in the past 25 years. Ultra-rare coins were rising by leaps and bounds even as gold and silver prices sagged in the 1980s and 1990s. But this pattern doesn't necessarily have to continue in the future. Perhaps after the extraordinary rise in coins worth, say, \$50,000 or more, these will begin to rise more slowly than some of the lower-valued, more common coins that have been left behind—the ones more closely tied to the market price of gold and silver.

That the surge in high-end coin values has coincided with the extreme rise in incomes among the top 1 percent of the U.S. population should not be surprising. Over the past two decades, millionaires and billionaires have clearly moved part of their enormous wealth into rare coins, and naturally they have tended to acquire the best of the best, and the price of gold or silver was probably far from their minds at the

Table 15.3 A Sample of Exceptionally Rare Coins

				Vs	Value	Gain	in
Year	Coin	Grade	Metal	1980	2007	Total	Per Year
1907	Indian Head Double Eagle Pattern	Gem proof	Gold	\$500,000	\$12,500,000	2,400%	12.7%
1933	St. Gaudens Double Eagle ^a	Uncirculated	Gold	\$250,000	\$8,500,000	3,300%	14.0%
1804	Bust silver dollar	Choice proof	Silver	\$250,000	\$5,000,000	1,900%	11.7%
1894-S	Barber dime	Proof	Silver	\$100,000	\$1,500,000	1,400%	10.6%
1913	Liberty nickel	Choice proof	Nickel	\$250,000	\$6,000,000	2,300%	12.5%
1822	Half Eagle	Extremely fine	Gold	\$650,000	\$5,000,000	%699	7.8%
1792	Half dime	Very fine	Silver	\$5,000	\$85,000	1,600%	11.1%
1794	Silver dollar	Extremely fine	Silver	\$25,000	\$250,000	%006	8.9%
1796	Quarter dollar	Extremely fine	Silver	\$7,500	\$40,000	433%	6.4%
1895	Silver dollar	Choice proof	Silver	\$17,500	\$45,000	157%	3.6%

^a Although there is a case in court relating to the legal ownership of 10 1933 Double Eagles, as of this writing, ownership by private citizens is illegal, except for one SOURCE: Jeff Garrett, author (with Ron Guth) of 100 Greatest U.S. Coins, 2nd ed. (Atlanta: Whitman Publishing, 2005). example. (See Paul Gilkes, "Government Denies 1933 \$20 Claims," Coin World, September 3, 2007.)

time. (If you were buying a \$2 million gold coin, would you care if an ounce of gold was worth \$800 or \$2,000?) But most others, who could only aspire to rare coins that were closer to their metallic value, were clearly very sensitive to changes in gold and silver prices and perhaps stayed away from the rare coin market because metal prices were weak. Hence, more common rare coins lagged the rarest.

But a more likely reason was simply that nobody cared about investing in coins at the time. During the 1990s the investment world was focused on the stock market, and gold probably never even crossed most people's minds. Who cared if gold was up or down 3 percent if many stocks were doubling in value? Gold and silver prices were being monitored by the handful of people who were worried far too soon, as it turned out, about issues like American debt that have only recently erupted into the serious economic problems—and growing financial risks—that we are beginning to face today. Now that financial markets and the dollar could begin to break down, as many are expecting today, I think the value of a broad array of rare coins, including the most common and moderately priced, could begin to rise sharply—and faster than gold and silver.

While there are more than a million active American coin collectors, rare coin investors are very small in number—certainly far less than 1 percent of the number of stock market investors. But if gold were to break \$1,000 and silver \$17 an ounce as stocks and bond markets became minefields, as they were in the 1970s, a growing number of middle-class men and women would likely turn to the rare coin market seeking to protect their wealth, thanks mostly to the Internet. Both the Wall Street executive and the Kansan farmer, who could never—and probably *would* never—walk into a coin shop, can now surf the Web to find gold and silver easily. And in time, if precious metals continue to climb in value, many people will learn that rare coin prices tend to rise faster than the metals of which they are made.

Gold and silver coins have only been selling on the Internet for a little over 10 years, many of them bad years for precious metals prices, like the 1990s, when E-Trade was a far more popular investment site. Although it has yet to happen, tens of millions of dollars in coin orders—a tiny investment speck in the trillion-dollar financial world—could conceivably be placed on precious metals web sites in a single night. And it

remains to be seen how a sudden rush of capital into rare coins would affect the minuscule market as firms scrambled to fill orders. Precious metals web sites, which after all have only been operating for a handful of years, have yet to handle a sudden massive flow of orders. Although there have been flurries of intense activity during disasters like 9/11 and Y2K, these have been short-lived mostly because central banks successfully contained the price of gold and prevented financial panic, as they have done many times in the past. But if gold began to surge out of central banks' control, as I believe will eventually happen, there would naturally be an intense flow of orders into gold shops.

Picture the few dozen poorly staffed coin shops across the country, which handle an extremely low number of orders each day. Aside from Internet orders, I believe a typical precious metals specialist at any major firm is lucky to have more than 10 phone orders in a day, and there are probably fewer than 2,000 such specialists across the country. It is a tiny industry. When a metals specialist gets an order for, say, 10 St. Gaudens Double Eagles in MS-64, his firm rarely holds them in inventory: The firm must go out in the market and buy them, hoping that the price is low and that other firms are not out in the market looking for the same coins. Unfortunately for him, when rising gold prices cause the common date market to heat up, demand spikes and supply dries up: Coin holders, unsure if they will be selling too cheaply, invariably decide to sell only to high bidders, which causes a chain reaction of rising prices. This is why in early 2006, when gold rose by more than 25 percent, several popular common date coins rose by double that percentage.

Buying rare coins used to mean going to a coin shop that could generally be found only in a city or large town, a fact that made the market all but inaccessible to many people. One had to leave the house. At shops, buyers saw only the inventory each establishment had on hand, or could order unseen coins from the dealer or magazines at the risk of obtaining a coin of lesser quality than expected. Although many coins they could see were graded, these grades reflected the opinion of an individual shop owner and not an independent specialist. And some sellers were no doubt tempted to grade a newly purchased \$10 Indian Head in MS-62 as a more valuable MS-63.

Today, the Internet has made the rare coin market far more transparent and the ease of buying and selling is greater than ever. Furthermore,

with PCGS and NGC grading, any coin can be certified with an opinion widely accepted among investors and collectors, which facilitates the confident participation of novices in the market. Prices can be compared among a great many firms online, and the openness of the Internet itself tends to reveal unethical firms quickly. Considering these factors, the rare coin market today is truly a relatively new way to preserve part of one's wealth and diversify assets away from other financial markets. I think this tiny little market, a speck in the \$140 trillion global asset ocean, could be a mini-NASDAQ in the making.

Notes

- 1. Quoted from Alison Frankel, Double Eagle: The Epic Story of the World's Most Valuable Coin (New York: W.W. Norton & Company, 2006), 46.
- 2. Alan Greenspan, "Gold and Economic Freedom," in Ayn Rand, *Capitalism: The Unknown Ideal* (Chicago: Signet, 1962), 107
- 3. Frankel, Double Eagle, 48.
- 4. David Bowers, *The Expert's Guide to Collecting & Investing in Rare Coins* (Atlanta: Whitman Publishing, 2005), 8–9.
- 5. Robert Motherwell, "A \$20 Gold Coin—For \$1.9 Million," *Wall Street Journal*, February 24, 2006.
- 6. Scott Travers, Rare Coin Investment Strategy (New York: Simon & Schuster, 1986), 6.
- 7. A great book in which to see images of the 1933 Double Eagle as well as other spectacular American rare coins is Jeff Garrett and Ron Guth's 100 Greatest U.S. Coins, 2nd ed. (Atlanta, GA: Whitman Publishing, 2005).
- 8. Coin dealers are not required to report their activity to the U.S. government, making a solid estimate of the coin market's size impossible. David Bowers, one of the authorities on the gold market, speculates (which is all one can do) that as much as \$500 million could trade annually in the American coin market, but he included bullion coins in this figure, which dominate sales. Bowers, *The Expert's Guide*, 30.
- 9. Ibid., 484.

Conclusion

Comparing the 1970s Gold Boom with Today's

n the postwar history of finance, other than the present rally there has only been one gold bull market, the one that occurred between └ 1971 and 1980. (See Figure C.1.) Before 1971, gold was not really regarded as an investment—it was money; it was financial insurance; but it was not a "risk asset" as it is commonly regarded among financial professionals today. Gold was money by definition—a universally accepted medium of exchange, a standard of value, and a store of value—and all paper currencies were *receipts* ultimately exchangeable for that money by government decree: The dollar could be exchanged by the world's principal central banks for gold, which made every major currency everywhere ultimately exchangeable for hard money. A bet on gold in, say, Italy in 1960 was really a bet against the Italian lira because gold was frozen at 35 dollars an ounce: Owning dollars in cash produced the same effect as owning gold, a zero return on investment. It was not until 1971, when President Richard Nixon ended the dollar's convertibility into gold in the beginning of an inflationary decade, that the metal became

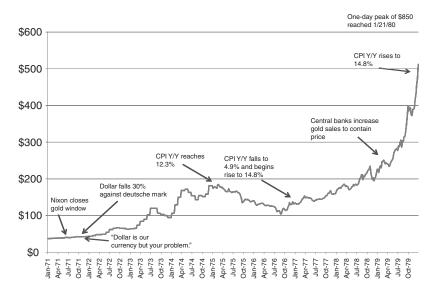


Figure C.1 The Price of Gold 1971–1980

Sources: Bloomberg, TRS.

an investment offering potential returns against *all* currencies—that is, against paper money, per se.

The 1970s gold bull market, which from trough to peak provided a 2,300 percent return, ended with a sharp decline in 1980. To consider when the present gold bull market could end, it would be useful to consider the two main drivers of the metal's decline in that year. The first was a surge in real (inflation-adjusted) interest rates that made moving out of gold and into bonds a great opportunity. Inflation, which rose to 14.8 percent in 1979, had been causing severe dislocations not only in the economy, but in financial markets, where gold and other real assets with fixed supplies had begun moving into investment manias. Gold would peak at \$850 and silver would rise to \$50 an ounce.

To subdue runaway inflation, then Federal Reserve Chairman Paul Volcker (today an economic adviser to President Obama) was forced to raise interest rates dramatically. The Federal Funds rate peaked at over 20 percent, a dosage of harsh medicine that led to one of most severe recessions since World War II. The recession caused businesses that relied on lending, like those in the auto and real estate sectors, to be hit extremely hard and bankruptcies surged across the country.

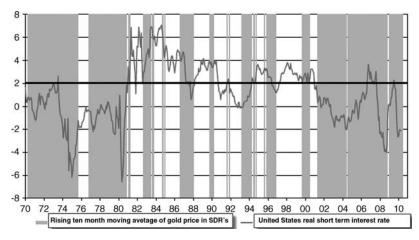


Figure C.2 Real Interest Rates

Sources: Valu-Trac.

Even as inflation peaked and began a secular descent that would last many years, real interest rates* remained at very high levels, giving savers a strong incentive to dump assets like gold, which pays no interest, and invest in the bond market. (This makes complete sense: if you are losing money in bonds and want a safe investment alternative, gold becomes an attractive option, but if *real* interest rates are rising, bonds become attractive.) Highly leveraged businesses across the economy went belly-up, leaving the corporate sector quite lean, and total U.S. debt as a percentage of GDP was below 200 percent. (From there, American leverage climbed steadily to over 350 percent by the time the credit crisis erupted in 2007.)

The 1980s were heaven for savers, who were being lavishly rewarded for dumping gold. Foreigners buying U.S. bonds received the double benefit of high interest rates and a rising dollar. But compare the high real interest rates of the early 1980s with the *negative* real interest rates of today. (See Figure C.2.) It was not until the federal funds rate climbed above 20 percent that gold peaked in 1980; but today the federal funds

^{*}To make a rough calculation of the real interest rate, simply subtract inflation from the interest rate. For example, if the ten-year Treasury bond is yielding 4 percent and inflation is 2 percent, the real interest rate is 2 percent (4 percent - 2 percent).

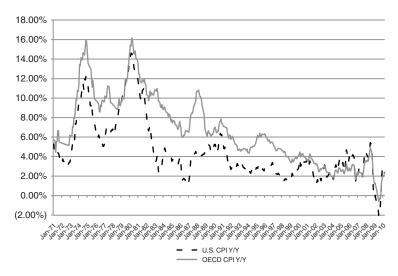


Figure C.3 Inflation, 1971 to Present (U.S. and OECD)

Source: Bloomberg.

rate is locked at zero. Certificate of deposit rates and savings rates at banks and brokerage houses are far from attractive—they are negligible, substantially below 1 percent for maturities below a year. And long-term rates, unless one would like to buy risky Venezuelan bonds, are not much more attractive. The 30-year Treasury bond yields 3 percent compared with four to five times that rate at several points in the early 1980s. Inflation, which peaked at 15 percent three decades ago, is one-fourth that level today and there is a significant threat of deflation, a fall in the price level, as a result of the excess capacity and joblessness in the economy. (See Figure C.3.) Consequently, there is little concern that the Fed is about to increase interest rates to even 1 percent: The bond market is currently pricing in a year-end 2010 fed funds rate of below 0.50 percent. Hence, the inflation and interest rate environment today is actually the inverse of the one the United States was experiencing when gold began declining in 1980: There is little incentive for dumping gold to put savings into bonds.

A second major factor that drove gold prices down was the increasing attractiveness of many financial assets that competed with gold during the early 1980s. After a dark decade for equities, during which investors



Figure C.4 S&P 500 Price-to-Earnings Ratio, 1979 to Present Source: Bloomberg.

in the stock market lost about half their money after adjusting the major indexes' returns for inflation, valuations looked extremely attractive, as can be seen in Figure C.4. The real estate market, always heavily dependent on borrowing, had been hit hard and construction had been crippled. But as interest rates began a secular decline, borrowing rates became increasingly manageable and a growing number of abandoned projects became promising. The high-yielding bonds of struggling companies that had survived Volker's harsh medicine became irresistible to the growing number of investors who could see light at the end of the tunnel. And fortunately, the economic rebound from the recession was quite strong, helped by plummeting interest rates.

But today, the S&P 500 trades on a price-to-earnings ratio of 15x, which is above the historical average for stocks—this despite the lingering risks to the economy, a 10 percent unemployment rate, and the prospect of higher tax rates in the years ahead. Bond yields, from low-yielding U.S. Treasuries to high-yield bonds, are not far from all-time lows, making them far less attractive than they were in the 1980s. The residential real estate market, despite some signs of stabilization, is recovering from a collapse and it seems unlikely, considering the remaining

gargantuan number of foreclosed homes for sale (and more that have yet to hit the market), that investment returns will become attractive any time soon. Hence, the attractive valuation levels for several major asset classes—stocks, bonds and real estate—in the early 1980s are absent today. Despite gold's limitations as an investment asset, the alternatives are not shining as brightly as they were 30 years ago, when it made sense to sell gold.

Perhaps the biggest threat to the present gold rally is government, which in its zeal to keep the economy running with artificial strength—via deficit spending and monetary expansion—has encouraged many to flee the currency it prints. Gold is a financial asset that has few friends, as it potentially enriches a small number of people—those who can afford to buy it and protect their wealth—and this can indirectly contribute to the impoverishment of the many living day to day with devaluing currency. Large flows into gold have deflationary consequences since such movements invariably pull money out of productive activities that are beneficial to the economy.

Funds flowing into sovereign bonds help reduce the interest costs that a hot dog vendor pays in the financing of his cart; money flowing out of sovereign bonds could lead to sharply rising interest rates that could hurt the hot dog vendor—and cripple entire economies. Hence, the movement of funds out of assets (like government bonds) that benefit the economy and into polished and shiny rocks—which potentially benefit a small number of individuals and companies—is a financial transfer that could begin to raise eyebrows among central bankers and other financial authorities. If the gold boom gains strength and turns into a rush—which is certainly plausible and I think highly probable—this could force the government's hand in the years ahead to impose restrictions on the gold trade. But considering how few own precious metals and how diminutive the gold trade is today, such a concern is likely premature.

About the Author

Shayne McGuire manages the GBI Gold Fund and is the head of Global Research at Teacher Retirement System of Texas, one of the world's largest pension funds. With 18 years of financial experience, McGuire has managed a \$2 billion European equity portfolio and was ranked among the best Latin American analysts by *Institutional Investor* in the late 1990s. An avid gold investor, in recent years he has worked closely with Austin Rare Coins, one of the country's leading precious metals companies. McGuire graduated from Fordham University and holds a MA in History and an MBA from the University of Texas at Austin. He lives in Austin, Texas, with his family.

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